



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>5</sup> :</b> <b>C12N 15/11, C12Q 1/68</b>	<b>A2</b>	<b>(11) International Publication Number:</b> <b>WO 93/16178</b> <b>(43) International Publication Date:</b> 19 August 1993 (19.08.93)
<b>(21) International Application Number:</b> PCT/US93/01294 <b>(22) International Filing Date:</b> 12 February 1993 (12.02.93) <b>(30) Priority data:</b> 07/837,195 12 February 1992 (12.02.92) US <b>(71) Applicant:</b> THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; Washington, DC (US). <b>(72) Inventors:</b> VENTER, Craig, J. ; 1718 Nordic Hill Circle, Silver Spring, MD 20906 (US). ADAMS, Mark, D. ; 12812 Sage Terrace, Germantown, MD 20874 (US). MORENO, Ruben, F. ; 14415 Coral Gables Way, North Potomac, MD 20878 (US).		<b>(74) Agents:</b> ALTMAN, Daniel, E. et al.; Knobbe, Martens, Olson and Bear, 620 Newport Center Drive, 16th Floor, Newport Beach, CA 92660 (US). <b>(81) Designated States:</b> AU, CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). <b>Published</b> <i>Without international search report and to be republished upon receipt of that report.</i>
<b>(54) Title:</b> SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT  <b>(57) Abstract</b>  Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.		

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SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION  
PRODUCT

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Technical Field

The present invention relates to newly identified polynucleotide sequences corresponding to transcription products of human genes, and to complete gene sequences associated therewith.

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Background

This invention relates to human genes. Identification and sequencing of human genes is a major goal of modern scientific research. The sequence of human genes is more than just a scientific curiosity. For example, by identifying genes and determining their sequences, scientists have been able to make large quantities of valuable human "gene products." These include human insulin, interferon, Factor VIII, tumor necrosis factor, human growth hormone, tissue plasminogen activator, and numerous other compounds. Additionally, knowledge of gene sequences can provide the key to treatment or cure of genetic diseases (such as muscular dystrophy and cystic fibrosis). The present invention represents a quantum leap forward in mankind's knowledge of human gene sequences.

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There are several basic concepts of molecular biology which figure prominently in the invention. A brief explanation of those concepts follows. Additional background information and definitions for scientific terms can be found

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in the literature. See, for example, "Glossary of Genetics, Classical and Molecular" by R. Rieger, A. Michaelis, and M.M. Green (Fifth Edition, Springer-Verlag, New York (1991)). The contents of this and other publications cited in the specification are incorporated by reference herein.

At an initial level, the present invention is based on identification and characterization of gene segments. Genes are the basic units of inheritance. Each gene is a string of connected bases called nucleotides. Most genes are formed of deoxyribonucleic acid, DNA. (Some viruses contain genes of ribonucleic acid, RNA.) The genetic information resides in the particular sequence in which the bases are arranged. A short sequence of nucleotides is often called a polynucleotide or an oligonucleotide.

Like genes, polypeptides are built from long strings of individual units. These units are amino acids. The nucleotide sequence of a gene tells the cell the sequence in which to arrange the amino acids to make the polypeptide encoded by that gene. In general, chains of up to about 200 amino acids are called polypeptides, while proteins are larger molecules made up of polypeptide subunits; both types of molecules are referred to generally herein as polypeptides. A triplet of nucleotides (codon) in DNA codes for each amino acid or signals the beginning or end of the message (anticodon). The term codon is also used for the corresponding (and complementary) sequences of three nucleotides in the mRNA into which the original DNA sequence is transcribed.

Generally, enzymes in the cell transcribe the permanent DNA of the gene into a temporary RNA copy, called messenger RNA or mRNA. The mRNA, in turn, can be translated into a polypeptide by the cell. This entire process is called gene expression, and the polypeptide is the gene product encoded by the gene.

Scientists have previously discovered how to reverse the transcription process and copy mRNA back into DNA using an



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enzyme called reverse transcriptase. The resulting is called complementary DNA, or cDNA. This is schematically shown in the single Figure. When substantially all of the mRNA from one cell or tissue is converted to cDNA at once and cloned into multiple copies of a recombinant vector to allow replication and manipulation in the laboratory, the result is called a cDNA library.

The various types of genes include those which code for polypeptides, those which are transcribed into RNA but are not translated into polypeptides, and those whose functional significance does not demand that they be transcribed at all. Most genes are found on large molecules of DNA located in chromosomes. Double stranded cDNA carries all the information of a gene. Each base of the first strand is joined to a complementary base (hybridized) in the second strand. The linear DNA molecules in chromosomes have thousands of genes distributed along their length. Chromosomes include both coding regions (coding for polypeptides) and noncoding regions; the coding regions represent only about three percent of the total chromosome sequence.

An individual gene has regulatory regions that include a promoter which directs expression of the gene, a coding region which can code for a polypeptide, and a termination signal. The regulatory DNA sequence is usually a noncoding region that determines if, where, when, and at what level a particular gene is expressed.

The coding regions of many genes are discontinuous, with coding sequences (exons) alternating with noncoding regions (introns). The final mRNA copy of the gene does not include these introns (which can be much longer than the coding region itself), although it does contain certain untranslated regions that usually do not code for the polynucleotide gene product. Untranslated sequences at the beginning and end of the mRNA are known as 5'- and 3'-untranslated regions,

respectively. This nomenclature reflects the orientation of the nucleotide constituents of the mRNA.

5 A cDNA is a DNA copy of a messenger RNA, which contains all of the exons of a gene. The cDNA can be thought of as having three parts: an untranslated 5' leader, an uninterrupted polypeptide-coding sequence, and a 3' untranslated region. The untranslated leader and trailing sequences are important for initiation of translation, mRNA stability, and other functions. The untranslated leader and trailing sequences are called 5'- and 3'-untranslated sequences, respectively. The 3' untranslated sequence is usually longer than the 5' untranslated leader, and can be longer than the polypeptide-coding sequence. The untranslated regions typically have many, randomly-distributed stop codons, and do not display the nonrandom base arrangements found in coding sequences. The 5'-untranslated sequence is relatively short, generally between 20 and 200 bases. The 3'-untranslated sequence is often many times longer, up to several thousand bases.

20 The translated or coding sequence begins with a translational start codon (AUG or GUG) and ends with a translational stop codon (UAA, UGA, or UAG). Generally, translation begins at the first "start" codon on the mRNA and proceeds to the first "stop" codon. Coding sequences can be distinguished by their nonrandom distribution of bases; numerous computer algorithms have been developed to distinguish coding from noncoding regions in this way.

30 Human DNA differs from person to person. No two persons (except perhaps identical twins) have identical DNA. While the differences, called allelic variations or polymorphisms, are slight on a molecular level, they account for most of the physical and other observable differences between individuals. It has been estimated that approximately 14 million sequence polymorphism differences exist between individuals.

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The ability of one strand of DNA to attach or hybridize to a complementary strand has already been exploited for several purposes. For example, small pieces of DNA (15 to 25 base pairs long) can be made which will hybridize to longer strands of DNA which have a complementary sequence. These short "primers" can be selected such that they hybridize to a specific, unique location on the longer strand. Once the primers have hybridized to their target on the DNA, the polymerase chain reaction (PCR) can be employed to generate millions of copies of (or amplify) the particular segment of DNA between the locations to which two primers are bound. Briefly, this technique allows amplification of a DNA region situated between two convergent primers, using oligonucleotide primers that hybridize to opposite strands. Primer extension proceeds inward across the region between the two primers, and the product of DNA synthesis of one primer serves as a template for the other primer. Repeated cycles of DNA denaturation, annealing of primers, and extension result in an exponential increase in the number of copies of the region bounded by the primers.

Similarly, a labeled segment of single-stranded DNA can be hybridized to a longer DNA sequence, such as a chromosome, to mark a specific location on the longer sequence. Segments of DNA 50 bases long or longer that hybridize to a unique DNA location in the human genome are extremely unlikely to hybridize elsewhere in the human genome.

The Human Genome Project is an effort to sequence all human DNA (the human genome). The human genome is estimated to comprise 50,000 - 100,000 genes, up to 30,000 of which might be expressed in the brain (Sutcliffe, *Ann. Rev. Neurosci.* 11:157 (1988)). Once dedicated human chromosome sequencing begins in three to five years, it was expected that 12-15 years will be required to complete the sequence of the genome (Report of the Ad Hoc Program Advisory Committee on Complex Genomes, Reston, Va., Feb. 1988, D. Baltimore Ed. (NIH, Bethesda, Md, 1988)). At that rate, the majority of

human genes would remain unknown for at least the next decade. The present invention can greatly accelerate the pace at which human genes can be identified and mapped. Most gene researchers, in conjunction with publication of their results in this field, submit sequence data to the GenBank database. Prior to the present invention, GenBank listed the sequences of only a few thousand human genes and less than two hundred human brain mRNAs (GenBank Release 66.0, December, 1990).

The role of sequencing complementary DNA (cDNA), reverse transcribed from mRNA, as a part of the human genome project has been vigorously debated since the idea of determining the complete nucleotide sequence of humans first surfaced. The coding sequence of all human genes represents most of the information content of the genome, but only 3-5% of the total DNA. In contrast, cDNA (which is only made from the transcription product of active genes) is one-half to three-fourths (the remainder being 5'- and 3'-untranslated sequence) meaningful genetic information. Thus, some have argued that cDNA sequencing should take precedence over genomic sequencing (Brenner, CIBA Found. Symp. 149:6 (1990)). However, until now, such arguments have not been heeded.

Genomic sequencing proponents have argued the difficulty of finding every mRNA expressed in all tissues, cell types, and developmental states, and that much valuable information from intronic and intergenic regions, including control and regulatory sequences, will be missed by cDNA sequencing. (Report of the Committee on Mapping and Sequencing the Human Genome, National Research Council (National Academy Press, Washington, D.C. 1988)). Further, sequencing of transcribed regions of the genome using cDNA libraries has heretofore been considered impractical or unsatisfactory. Libraries of cDNA were believed to be dominated by repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes comprising common or housekeeping sequences. It was believed that cDNA libraries would provide few sequences

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corresponding to structural and regulatory polypeptides or peptides. See, for example, Putney, et al., *Nature* 302:718-721 (1983). Putney, et al. sequenced over 150 clones from a rabbit muscle cDNA library and identified clones for 13 of the 19 known muscle polypeptides, including one new isotype but no unknown coding sequences.

Another perceived drawback of cDNA sequencing was that some mRNAs are abundant, and some are rare. The cellular quantities of mRNA from various genes can vary by several orders of magnitude. This led critics to believe that most information obtained from cDNA sequencing would be repetitious and useless.

The present invention demonstrates that, despite such skepticism, cDNA sequencing now provides a rapid method for obtaining enormous amounts of valuable genetic information and DNA products of great utility for the biotechnology and pharmaceutical industries. Not only can many distinct cDNAs be isolated and sequenced, even partial cDNAs can be used, with conventional, well-understood methods, to isolate entire genes, and to determine the chromosomal locations and biological functions of these genes. As is demonstrated here, fragments of only a few hundred bases are sufficient, in many cases, to identify the probable function of a new human gene if it is similar in structure to a gene from another animal, or from plants or bacteria. Similarly, even fragments of untranslated regions of a cDNA can be used to: i) isolate the coding sequence of the cDNA; ii) isolate the complete gene; iii) determine the position of the gene on a human chromosome, and hence the potential of the gene to cause a human genetic disease; and iv) determine the function of the gene by means of experiments in which the function of the native gene is disrupted by the addition of a short DNA fragment to the cell, e.g., using triple helix or antisense probes.

Because coding regions comprise such a small portion of the human genome, identification and mapping of transcribed

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regions and coding regions of chromosomes is of significant interest. There is a corresponding need for reagents for identifying and marking coding regions and transcribed regions of chromosomes. Furthermore, such human sequences are valuable for chromosome mapping, human identification, identification of tissue type and origin, forensic identification, and locating disease-associated genes (i.e., genes that are associated with an inherited human disease, whether through mutation, deletion, or faulty gene expression) on the chromosome.

#### SUMMARY OF THE INVENTION

Contrary to the expectations of the scientific community, cDNA screening and sequencing techniques have now been used to discover a large number of heretofore unknown human genes. Disclosed herein are over 2,400 new human polynucleotide sequences. These sequences could represent up to 5% of all human genes. The novelty of these sequences has been established through comparison to both nucleotide sequence databases and amino acid sequence databases. Surprisingly, over 80% of the sequences generated were unrelated to any sequences previously described in the literature.

The sequences of the present invention were ascertained using a fast approach to cDNA characterization. This approach could facilitate the tagging of most expressed human genes within a few years at a fraction of the cost of complete genomic sequencing, provide new genetic markers, provide new DNA-based therapeutics and diagnostics, and provide other valuable nucleotide reagents.

The sequences disclosed herein, styled Expressed Sequence Tags ("ESTs"), are markers for human genes actually transcribed *in vivo*. Techniques are disclosed for using these ESTs to obtain the full coding region of the corresponding gene. The use of ESTs, complete coding sequences, or fragments thereof for marking chromosomes, for

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mapping locations of expressed genes on chromosomes, for individual or forensic identification, for mapping locations of disease-associated genes, for identification of tissue type, and for preparation of antisense sequences, probes, and constructs is discussed in detail below. Unlike the random genomic DNA sequence tagged sites (STSs) (Olson et al., *Science* 245:1434 (1989)), ESTs point directly to expressed genes.

Various aspects of the present invention thus include the individual ESTs, corresponding partial and complete cDNA, genomic DNA, mRNA, antisense strands, triple helix probes, PCR primers, coding regions, and constructs. Also, where one skilled in the art is enabled by this specification to prepare expression vectors and polypeptide expression products, they are also within the scope of the present invention, along with antibodies, especially monoclonal antibodies, to such expression products.

#### BRIEF DESCRIPTION OF THE DRAWING

The single drawing Figure schematically illustrates the progression from chromosome to gene to mRNA to cDNA.

#### DETAILED DESCRIPTION OF THE INVENTION

The detailed description that follows provides not only the actual sequence of each new EST, but also explains how the ESTs were obtained, how to obtain the corresponding complete cDNA sequence and the corresponding genomic DNA sequence, how to make DNA constructs from the ESTs and corresponding sequences, how to use those sequences as reagents in molecular biology and other fields, how to produce gene products from the ESTs and corresponding sequences and antibodies to those gene products, and the functional categories of many ESTs and corresponding genes. Furthermore, numerous actual working examples and predictive

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examples are provided to demonstrate and exemplify numerous aspects of the invention.

### I. ESTs from cDNA Libraries

5       The sequences of the present invention were isolated from commercially available and custom made cDNA libraries using a rapid screening and sequencing technique. In general, the method comprises applying conventional automated DNA sequencing technology to screening clones, advantageously  
10       randomly selected clones, from a cDNA library. Preferably, the library is initially "enriched" through removal of ribosomal sequences and other common sequences prior to clone selection. According to the present method, ESTs are generated from partial DNA sequencing of the selected clones.  
15       The ESTs of the present invention were generated using low redundancy of sequencing, typically a single sequencing reaction. While single sequencing reactions may have an accuracy as low as 97%, this nevertheless provides sufficient fidelity for identification of the sequence and design of PCR  
20       primers.

      Most human genes can be identified by EST sequencing from libraries of cDNA copies of messenger RNAs. However, some genes are expressed only at specific times during embryonic development, or only in small amounts in a few  
25       specific cell types. Other genes have mRNAs that are degraded very quickly by the cell in which they are expressed. If any of these are the case, transcripts of the gene will not be represented in cDNA libraries so the gene will not be identifiable by EST sequencing. A new method  
30       called "exon amplification", however, can be used to isolate and identify transcripts of such genes.

      Exon amplification works by artificially expressing part or all of a gene that is contained in a cloned fragment of genomic DNA such as a cosmid or yeast artificial chromosome  
35       (YAC). The gene is cloned into a special vector, designed at MIT, that uses control elements from virus genes to express



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the protein-coding exons of the human gene of interest. Exon trapping shows considerable promise as a general technique for identifying those genes in the human genome that cannot be found by cDNA cloning and EST sequencing. Exon amplification will also be useful for identifying the genes in regions of genomic DNA to which disease genes have been mapped. The exon amplification method can be used directly with the cosmid and YAC clones from human chromosomes that are being obtained by both NIH and DOE supported human genome centers. ESTs comprise DNA sequences corresponding to a portion of nuclear encoded messenger RNA. An EST is of sufficient length to permit: (1) amplification of the specific sequence from a cDNA library, e.g., by polymerase chain reaction (PCR); (2) use of a synthetic polynucleotide corresponding to a partial or complete sequence of the EST as a hybridization probe of a cDNA library, generally having 30 - 50 base pairs; or (3) unique designation of the pure cDNA clone from which the EST was derived (the EST clone) for use as a hybridization probe of a cDNA library. Preferably, EST-derived primer pairs and sequences amplify or detectably hybridize to a sequence from a genomic library.

It has been found that sufficient information is contained in the 150-400 base ESTs from one sequencing run to effect preliminary identification and exact chromosome mapping. Accordingly, the ESTs disclosed herein are generally at least 150 base pairs in length. The length of an EST is determined by the quality of sequencing data and the length of the cloned cDNA. Raw data from the automated sequencers is edited to remove low quality sequence at the end of the sequencing run. High quality sequences (usually a result of sequencing templates without excessive salt contamination) generally give about 400 bp of reliable sequence data; other sequences give fewer bases of reliable data. A 150 bp EST is long enough to be translated into a 50 amino acid peptide sequence. This length is sufficient to observe similarities when they exist in a database search. Furthermore, 150 bp is

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long enough to design PCR primers from each end of the sequence to amplify the complete EST. Sequences shorter than 150 bp are difficult to purify and use following PCR amplification. Furthermore, a 150 bp polynucleotide is likely to give a very strong signal with low background in a screen of a genomic library.

Finally, it is highly unlikely that a sequence of the same 150 bp exists in any genes in the genome besides the one tagged by the EST. Some closely related gene family members have very similar nucleotide sequences, but no examples of pairs of human genes with long segments of identical sequence have been reported to date. For instance, there are three known  $\beta$ -tubulin genes in humans. Several ESTs were found that matched one or another of these tubulin genes, but several new members of this gene family were also found and could be clearly distinguished from the three known members. ESTs that match perfectly to several different genes can be detected by hybridizing to chromosomes: if many chromosomal loci are observed, the sequence (or a close variant) is present in more than one gene. This problem can be circumvented by using the 3'-untranslated part of the cDNA alone as a probe for the chromosomal location or for the full-length cDNA or gene. The 3'-untranslated region is more likely to be unique within gene families, since there is no evolutionary pressure to conserve a coding function of this region of the mRNA.

As demonstrated in the Examples that follow, ESTs can be used to map the expressed sequence to a particular chromosome. In addition, ESTs can be expanded to provide the full coding regions, as detailed below. In this manner, previously unknown genes can be identified.

While a variety of cDNA libraries can be used to obtain ESTs, human brain cDNA libraries are exemplified and represent a preferred embodiment. Suitable cDNA libraries can be freshly prepared or obtained commercially, e.g., as shown in Examples 1, 2, and 11. The cDNA libraries from the

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desired tissue are preferably preprocessed by conventional techniques to reduce repeated sequencing of high and intermediate abundance clones and to maximize the chances of finding rare messages from specific cell populations. Preferably, preprocessing includes the use of defined composition prescreening probes, e.g., cDNA corresponding to mitochondria, abundant sequences, ribosomes, actins, myelin basic polypeptides, or any other known high abundance peptide; these prescreening probes used for preprocessing are generally derived from known ESTs. Other useful preprocessing techniques include subtraction, which preferentially reduces the population of certain sequences in the library (e.g., see A. Swaroop et al., *Nucl. Acids Res.* 19, 1954 (1991)), and normalization, which results in all sequences being represented in approximately equal proportions in the library (Patanjali et al, *Proc. Natl. Acad. Sci. USA* 88:1943 (1991)).

The cDNA libraries used in the present method will ideally use directional cloning methods so that either the 5' end of the cDNA (likely to contain coding sequence) or the 3' end (likely to be a non-coding sequence) can be selectively obtained."

Libraries of cDNA can also be generated from recombinant expression of genomic DNA. After they are amplified, ESTs can be obtained and sequenced, e.g., as illustrated in Example 11.

The sequences of the present invention include the specific sequences set forth in the Sequence Listing and designated SEQ ID NO: 1 - SEQ ID NO: 2412. In one aspect of this embodiment, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that comprise the cDNA coding sequences for polypeptides having less than 95% identity with known amino acid sequences (see Table 2) and more preferably less than 90% or 85% identity. In a second aspect, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that encode polypeptides having no similarity to known amino acid

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sequences (see Examples that follow). Precisely because they do not contain coding regions and are therefore more unique in their sequence structures, those sequences which meet neither of the preceding criteria can be most useful and are generally preferred for mapping.

Consistent with the NIH mission and its responsibilities to disseminate knowledge and share the tangible fruits of its research, the present inventors have taken a number of steps to facilitate sequence data and clone availability. All EST sequences have been submitted to GenBank (representing an addition equivalent to 7% of the human nucleotides in Release 69 of GenBank, September 1991). The corresponding cDNA clones have been submitted to the American Type Culture Collection and information on clones and sequences has been submitted to the Genome Data Base (Pearson, P. Nucl. Acids Res. 19 (Suppl.): 2237-9 (1991)).

## II. Complete Coding Sequences from ESTs

The ESTs of the present invention generally represent relatively small coding regions or untranslated regions of human genes. Although most of these sequences do not code for a complete gene product, the ESTs of the present invention are highly specific markers for the corresponding complete coding regions. The ESTs are of sufficient length that they will hybridize, under stringent conditions, only with DNA for that gene to which they correspond. Suitably stringent conditions comprise conditions, for example, where at least 95%, preferably at least 97% or 98% identity (base pairing), is required for hybridization. This property permits use of the EST to isolate the entire coding region and even the entire sequence. Therefore, only routine laboratory work is necessary to parlay the unique EST sequence into the corresponding unique complete gene sequence.

Thus, each of the ESTs of the present invention "corresponds" to a particular unique human gene. Knowledge

of the EST sequence permits routine isolation and sequencing of the complete coding sequence of the corresponding gene. The complete coding sequence is present in a full-length cDNA clone as well as in the gene carried on genomic clones. Therefore, each EST "corresponds" to a cDNA (from which the EST was derived), a complete genomic gene sequence, a polypeptide coding region (which can be obtained either from the cDNA or genomic DNA), and a polypeptide or amino acid sequence encoded by that region.

The first step in determining where an EST is located in the cDNA is to analyze the EST for the presence of coding sequence, e.g., as described in Example 14. The CRM program predicts the extent and orientation of the coding region of a sequence. Based on this information, one can infer the presence of start or stop codons within a sequence and whether the sequence is completely coding or completely non-coding. If start or stop codons are present, then the EST can cover both part of the 5'-untranslated or 3'-untranslated part of the mRNA (respectively) as well as part of the coding sequence. If no coding sequence is present, it is likely that the EST is derived from the 3'-untranslated sequence due to its longer length and the fact that most cDNA library construction methods are biased toward the 3' end of the mRNA.

One general procedure for obtaining complete sequences from ESTs is as follows:

1. Purify selected human DNA from an EST clone (the cDNA clone that was sequenced to give the EST), e.g., by endonuclease digestion using ECOR1, gel electrophoresis, and isolation of the aforementioned clone by removal from low-melting agarose gel.

2. Radiolabel the isolated insert DNA, e.g., with <sup>32</sup>P labels, preferably by nick translation or random primer labeling.

3. Use the labeled EST insert as a probe to screen a lambda phage cDNA library or a plasmid cDNA library.

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4. Identify colonies containing clones related to the probe cDNA and purify them by known purification methods.

5. Nucleotide sequence the ends of the newly purified clones to identify full length sequences.

5 6. Perform complete sequencing of full length clones by Exonuclease III digestion or primer walking. Northern blots of the mRNA from various tissues using at least part of the EST clone as a probe can optionally be performed to check the size of the mRNA against that of the purported full  
10 length cDNA.

An EST is a specific tag for a messenger RNA molecule. The complete sequence of that messenger RNA, in the form of cDNA, can be determined using the EST as a probe to identify a cDNA clone corresponding to a full-length transcript,  
15 followed by sequencing of that clone. The EST or the full-length cDNA clone can also be used as a probe to identify a genomic clone or clones that contain the complete gene including regulatory and promoter regions, exons, and introns.

20 ESTs are used as probes to identify the cDNA clones from which an EST was derived. ESTs, or portions thereof, can be nick-translated or end-labelled with  $P^{32}$  using polynucleotide kinase using labelling methods known to those with skill in the art. (Basic Methods in Molecular Biology, L.G. Davis, M.D.  
25 Dibner, and J.F. Battey, ed., Elsevier Press, NY, 1986). The lambda library can be directly screened with the labelled ESTs of interest or the library can be converted en masse to pBluescript (Stratagene, La Jolla, California) to facilitate bacterial colony screening. Both methods are well known in  
30 the art. Briefly, filters with bacterial colonies containing the library in pBluescript or bacterial lawns containing lambda plaques are denatured and the DNA is fixed to the filters. The filters are hybridized with the labelled probe using hybridization conditions described by Davis et al. The  
35 ESTs, cloned into lambda or pBluescript, can be used as positive controls to assess background binding and to adjust

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the hybridization and washing stringencies necessary for accurate clone identification. The resulting autoradiograms are compared to duplicate plates of colonies or plaques; each exposed spot corresponds to a positive colony or plaque. The colonies or plaques are selected, expanded and the DNA is isolated from the colonies for further analysis and sequencing.

The ESTs can additionally be used to screen Northern blots of mRNA obtained from various tissues or cell cultures, including the tissue of origin of the EST clone. Northern analysis will most often produce one to several positive bands. The bands can be selected for further study based on the predicted size of the mRNA.

Positive cDNA clones in phage lambda are analyzed to determine the amount of additional sequence they contain using PCR with one primer from the EST and the other primer from the vector. Clones with a larger vector-insert PCR product than the original EST clone are analyzed by restriction digestion and DNA sequencing to determine whether they contain an insert of the same size or similar as the mRNA size on a Northern blot.

Once one or more overlapping cDNA clones are identified, the complete sequence of the clones can be determined. The preferred method is to use exonuclease III digestion (McCombie, W.R, Kirkness, E., Fleming, J.T., Kerlavage, A.R., Iovannisci, D.M., and Martin-Gallardo, R., *Methods*: 3: 33-40, 1991). A series of deletion clones is generated, each of which is sequenced. The resulting overlapping sequences are assembled into a single contiguous sequence of high redundancy (usually three to five overlapping sequences at each nucleotide position), resulting in a highly accurate final sequence.

A similar screening and clone selection approach can be applied to obtaining cosmid or lambda clones from a genomic DNA library that contains the complete gene from which the EST was derived (Kirkness, E.F., Kusiak, J.W., Menninger, J.,

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Gocayne, J.D., Ward, D.C., and Venter, J.C. *Genomics* 10: 985-995 (1991). Although the process is much more laborious, these genomic clones can be sequenced in their entirety also. A shotgun approach is preferred to sequencing clones with inserts longer than 10 kb (genomic cosmid and lambda clones). In shotgun sequencing, the clone is randomly broken into many small pieces, each of which is partially sequenced. The sequence fragments are then aligned to produce the final contiguous sequence with high redundancy. An intermediate approach is to sequence just the promoter region and the intron-exon boundaries and to estimate the size of the introns by restriction endonuclease digestion (ibid.).

Using the sequence information provided herein, the polynucleotides of the present invention can be derived from natural sources or synthesized using known methods. The sequences falling within the scope of the present invention are not limited to the specific sequences described, but include human allelic and species variations thereof and portions thereof of at least 15-18 bases. (Sequences of at least 15-18 bases can be used, for example, as PCR primers or as DNA probes.) In addition, the invention includes the entire coding sequence associated with the specific polynucleotide sequence of bases described in the Sequence Listing, as well as portions of the entire coding sequence of at least 15-18 bases and allelic and species variations thereof. Furthermore, to accommodate codon variability, the invention includes sequences coding for the same amino acid sequences as do the specific sequences disclosed herein. Finally, although the error rate in the automated sequencing used in the present invention is small, there remains some chance of error. Therefore, claims to particular sequences should not be so narrowly construed as to require inclusion of erroneously identified bases or to exclude corrections.

Any specific sequence disclosed herein can be readily screened for errors by resequencing each EST in both directions (i.e., sequence both strands of cDNA).



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The sequences, constructs, vectors, clones, and other materials comprising the present invention can advantageously be in enriched or isolated form. As used herein, "enriched" means that the concentration of the material is at least about 2, 5, 10, 100, or 1000 times its natural concentration (for example), advantageously 0.01%, by weight, preferably at least about 0.1% by weight. Enriched preparations of about 0.5%, 1%, 5%, 10%, and 20% by weight are also contemplated. Further, removal of clones corresponding to ribosomal RNA and "housekeeping" genes and clones without human cDNA inserts results in a library that is "enriched" in the desired clones.

The term "isolated" requires that the material be removed from its original environment (e.g., the natural environment if it is naturally occurring). For example, a naturally-occurring polynucleotide present in a living animal is not isolated, but the same polynucleotide, separated from some or all of the coexisting materials in the natural system, is isolated.

It is also advantageous that the sequences be in purified form. The term "purified" does not require absolute purity; rather, it is intended as a relative definition. Individual EST clones isolated from a cDNA library have been conventionally purified to electrophoretic homogeneity. The sequences obtained from these clones could not be obtained directly either from the library or from total human DNA. The cDNA clones are not naturally occurring as such, but rather are obtained via manipulation of a partially purified naturally occurring substance (messenger RNA). The conversion of mRNA into a cDNA library involves the creation of a synthetic substance (cDNA) and pure individual cDNA clones can be isolated from the synthetic library by clonal selection. Thus, creating a cDNA library from messenger RNA and subsequently isolating individual clones from that library results in an approximately  $10^6$ -fold purification of the native message. Purification of starting material or

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natural material to at least one order of magnitude, preferably two or three orders, and more preferably four or five orders of magnitude is expressly contemplated.

5 In a cDNA library there are many species of mRNA represented. Each cDNA clone can be interesting in its own right, but must be isolated from the library before further experimentation can be completed. In order to sequence any specific cDNA, it must be removed and separated (i.e. isolated and purified) from all the other sequences. This  
10 can be accomplished by many techniques known to those of skill in the art. These procedures normally involve identification of a bacterial colony containing the cDNA of interest and further amplification of that bacteria. Once a cDNA is separated from the mixed clone library, it can be  
15 used as a template for further procedures such as nucleotide sequencing.

Although claims to large numbers of ESTs and corresponding sequences are presented herein, the invention is not limited to these particular groupings of sequences.  
20 Thus, individual sequences are considered as applicants' discoveries or inventions, as are subgroupings of sequences. All of the functional subgroupings set forth in the tables define groupings for which separate claims are contemplated as being within the scope of this invention. Moreover, in  
25 addition to claims to individual clones, it is intended that the present disclosure also support claims to numerical subgroupings. Thus, subgroupings of 50 ESTs (and corresponding sequences) are contemplated (e.g., SEQ ID NOS 1-50, 51-100, 101-150, etc.) as being within the scope of  
30 this invention, as are subgroupings of 5, 10, 25, 100, 200, and 500 ESTs and corresponding sequences.

### III. DNA Constructs

35 The present invention also includes recombinant constructs comprising one or more of the sequences as broadly described above. The constructs comprise a vector, such as

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a plasmid or viral vector, into which a sequence of the invention has been inserted, in a sense or antisense orientation. In a preferred aspect of this embodiment, the construct further comprises regulatory sequences, including for example, a promoter, operably linked to the sequence. Large numbers of suitable vectors and promoters are known to those of skill in the art, and are commercially available. The following vectors are provided by way of example.

**Bacterial:** pBs, phagescript,  $\phi$ X174, pBluescript SK, pBs KS, pNH8a, pNH16a, pNH18a, pNH46a (Stratagene); pTrc99A, pKK223-3, pKK233-3, pDR540, pRIT5 (Pharmacia).

**Eukaryotic:** pWLneo, pSV2cat, pOG44, pXT1, pSG (Stratagene); pSVK3, pBPV, pMSG, pSVL (Pharmacia).

Promoter regions can be selected from any desired gene using CAT (chloramphenicol transferase) vectors or other vectors with selectable markers. Two appropriate vectors are pKK232-8 and pCM7. Particular named bacterial promoters include lacI, lacZ, T3, T7, gpt, lambda P<sub>R</sub>, and trc. Eukaryotic promoters include CMV immediate early, HSV thymidine kinase, early and late SV40, LTRs from retrovirus, and mouse metallothionein-I. Selection of the appropriate vector and promoter is well within the level of ordinary skill in the art.

In a further embodiment, the present invention relates to host cells containing the above-described construct. The host cell can be a higher eukaryotic cell, such as a mammalian cell, or a lower eukaryotic cell, such as a yeast cell, or the host cell can be a procaryotic cell, such as a bacterial cell. Introduction of the construct into the host cell can be effected by calcium phosphate transfection, DEAE dextran mediated transfection, or electroporation (Davis, L., Dibner, M., Battey, I., **Basic Methods in Molecular Biology**, (1986)).

The constructs in host cells can be used in a conventional manner to produce the gene product coded by the recombinant sequence. Alternatively, the encoded polypeptide

can be synthetically produced by conventional peptide synthesizers.

Certain ESTs have already been preliminarily categorized by analogy to related sequences in other organisms (see Table 2). Table 10 of Example 10 categorizes particular ESTs broadly as metabolic, regulatory, and structural sequences where known. Constructs comprising genes or coding sequences corresponding to each of these categories are, therefore, specifically and individually contemplated.

Table 11 more particularly separates 127 new ESTs into 13 categories using a different criteria. These are genes related to cell surface; developmental control; energy metabolism; kinase and phosphatase; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. Table 11 further identifies the EST by the particular gene product for which it apparently codes. Each of these categories individually comprises a preferred category of EST, and preferred constructs and resulting polypeptide can be prepared from those ESTs or the corresponding complete gene sequence.

#### IV. ESTs and Corresponding Sequences as Reagents

Each of the cDNA sequences identified herein (and the corresponding complete gene sequences) can be used in numerous ways as polynucleotide reagents. The sequences can be used as diagnostic probes for the presence of a specific mRNA in a particular cell type. In addition, these sequences can be used as diagnostic probes suitable for use in genetic linkage analysis (polymorphisms). Further, the sequences can be used as probes for locating gene regions associated with genetic disease, as explained in more detail below.

The EST and complete gene sequences of the present invention are also valuable for chromosome identification.

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Each sequence is specifically targeted to and can hybridize with a particular location on an individual human chromosome. Moreover, there is a current need for identifying particular sites on the chromosome. Few chromosome marking reagents based on actual sequence data (repeat polymorphisms) are presently available for marking chromosomal location. The present invention constitutes a major expansion of available chromosome markers. One hundred ESTs have already been mapped to chromosomes. Using the techniques described in Example 5 or 6, the remaining ESTs and the corresponding complete sequences can similarly be mapped to chromosomes. The mapping of ESTs and cDNAs to chromosomes according to the present invention is an important first step in correlating those sequences with genes associated with disease.

Briefly, sequences can be mapped to chromosomes by preparing PCR primers (preferably 15-25 bp) from the ESTs. Computer analysis of the ESTs is used to rapidly select primers that do not span more than one exon in the genomic DNA, thus complicating the amplification process. These primers are then used for PCR screening of somatic cell hybrids containing individual human chromosomes. Only those hybrids containing the human gene corresponding to the EST will yield an amplified fragment.

PCR mapping of somatic cell hybrids is a rapid procedure for assigning a particular EST to a particular chromosome. Three or more clones can be assigned per day using a single thermal cycler. Using the present invention with the same oligonucleotide primers, sublocalization can be achieved with panels of fragments from specific chromosomes or pools of large genomic clones in an analogous manner. Other mapping strategies that can similarly be used to map an EST to its chromosome include in situ hybridization, prescreening with labeled flow-sorted chromosomes and preselection by hybridization to construct chromosome specific cDNA libraries. Results of mapping ESTs to chromosomal segments are listed in Tables 3 and 4.

Fluorescence in situ hybridization (FISH) of a cDNA clone to a metaphase chromosomal spread can be used to provide a precise chromosomal location in one step. This technique can be used with cDNA as short as 500 or 600 bases; however, clones larger than 2,000 bp have a higher likelihood of binding to a unique chromosomal location with sufficient signal intensity for simple detection. FISH requires use of the clone from which the EST was derived, and the longer the better. 2,000 bp is good, 4,000 is better, and more than 4,000 is probably not necessary to get good results a reasonable percentage of the time. For a review of this technique, see Verma et al., **Human Chromosomes: a Manual of Basic Techniques**. Pergamon Press, New York (1988).

Reagents for chromosome mapping can be used individually (to mark a single chromosome or a single site on that chromosome) or as panels of reagents (for marking multiple sites and/or multiple chromosomes). Reagents corresponding to noncoding regions of the genes actually are preferred for mapping purposes. Coding sequences are more likely to be conserved within gene families, thus increasing the chance of cross hybridizations during chromosomal mapping (see Tables 8 and 9).

Once a sequence has been mapped to a precise chromosomal location, the physical position of the sequence on the chromosome can be correlated with genetic map data. (Such data are found, for example, in V. McKusick, **Mendelian Inheritance in Man** (available on line through Johns Hopkins University Welch Medical Library).) The relationship between genes and diseases that have been mapped to the same chromosomal region are then identified through linkage analysis (coinheritance of physically adjacent genes).

Next, it is necessary to determine the differences in the cDNA or genomic sequence between affected and unaffected individuals. If a mutation is observed in some or all of the affected individuals but not in any normal individuals, then

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the mutation is likely to be the causative agent of the disease.

5 With current resolution of physical mapping and genetic mapping techniques, a cDNA precisely localized to a chromosomal region associated with the disease could be one of between 50 and 500 potential causative genes. (This assumes 1 megabase mapping resolution and one gene per 20 kb.)

10 Comparison of affected and unaffected individuals generally involves first looking for structural alterations in the chromosomes, such as deletions or translocations that are visible from chromosome spreads or detectable using PCR based on that cDNA sequence. Ultimately, complete sequencing of genes from several individuals is required to confirm the  
15 presence of a mutation and to distinguish mutations from polymorphisms.

In addition to the foregoing, the sequences of the invention, as broadly described, can be used to control gene expression through triple helix formation or antisense DNA or  
20 RNA, both of which methods are based on binding of a polynucleotide sequence to DNA or RNA. Polynucleotides suitable for use in these methods are usually 20 to 40 bases in length and are designed to be complementary to a region of the gene involved in transcription (triple helix - see Lee et  
25 al, *Nucl. Acids Res.* 6: 3073 (1979); Cooney et al, *Science* 241: 456 (1988); and Dervan et al, *Science* 251: 1360 (1991)) or to the mRNA itself (antisense - Okano, *J. Neurochem.* 56: 560 (1991); *Oligodeoxynucleotides as Antisense Inhibitors of Gene Expression*, CRC Press, Boca Raton, FL (1988)). Triple  
30 helix formation optimally results in a shut-off of RNA transcription from DNA, while antisense RNA hybridization blocks translation of an mRNA molecule into polypeptide. Both techniques have been demonstrated to be efficient in model systems. Information contained in the sequences of the  
35 present invention is necessary for the design of an antisense or triple helix oligonucleotide.

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The present invention is also useful tool in gene therapy, which requires isolation of the disease-associated gene in question as a prerequisite to the insertion of a normal gene into an organism to correct a genetic defect.   
5 high specificity of the cDNA probes according to this invention have promise of targeting such gene locations in a highly accurate manner.

The sequences of the present invention, as broadly defined, are also useful for identification of individuals   
10 from minute biological samples. The United States military, for example, is considering the use of restriction fragment length polymorphism (RFLP) for identification of its personnel. In this technique, an individual's genomic DNA is digested with one or more restriction enzymes, and probed on   
15 a Southern blot to yield unique bands for identifying personnel. This method does not suffer from the current limitations of "Dog Tags" which can be lost, switched, or stolen, making positive identification difficult. The sequences of the present invention are useful as additional   
20 DNA markers for RFLP.

However, RFLP is a pattern based technique, which does not directly focus on the actual DNA sequence of the individual. The sequences of the present invention can be used to provide an alternative technique that determines the   
25 actual base-by-base DNA sequence of selected portions of an individual's genome. These sequences can be used to prepare PCR primers for amplifying and isolating such selected DNA. One can, for example, take an EST of the invention and prepare two PCR primers from the 5' and 3' ends of the EST.   
30 These are used to amplify an individual's DNA, corresponding to the EST. The amplified DNA is sequenced.

Panels of corresponding DNA sequences from individuals, made this way, can provide unique individual identifications, as each individual will have a unique set of such DNA   
35 sequences, due to allelic differences. The sequences of the present invention can be used to particular advantage to



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obtain such identification sequences from individuals and from tissue, as explained in Examples 12 - 14.

5 The EST sequences from Examples 1 and 2 and the complete sequences from Example 13 uniquely represent portions of the human genome. Allelic variation occurs to some degree in the coding regions of these sequences, and to a greater degree in the noncoding regions. It is estimated that allelic variation between individual humans occurs with a frequency of about once per each 500 bases. Each of the ESTs or complete coding sequences comprising a part of the present invention can, to some degree, be used as a standard against which DNA from an individual can be compared for identification purposes. Because greater numbers of polymorphisms occur in the noncoding regions, fewer sequences are necessary to differentiate individuals. The noncoding sequences of Table 9 for example, could comfortably provide positive individual identification with a panel of perhaps 100 to 1,000 primers which each yield a noncoding amplified sequence of 100 bp. If predicted coding sequences, such as those from Table 6, are used, a more appropriate number of primers for positive individual identification would be 500-2,000.

15 If a panel of reagents from ESTs or complete sequences of this invention is used to generate a unique ID database for an individual, those same reagents can later be used to identify tissue from that individual. Positive identification of that individual, living or dead can be made from extremely small tissue samples.

25 Another use for DNA-based identification techniques is in forensic biology. PCR technology can be used to amplify DNA sequences taken from very small biological samples such as tissues, e.g., hair or skin, or body fluids, e.g., blood, saliva, semen, etc. In one prior art technique, gene sequences are amplified at specific loci known to contain a large number of allelic variations, for example the DQ $\alpha$  class II HLA gene (Erlich, H., PCR Technology, Freeman and Co.

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(1992)). Once this specific area of the genome is amplified, it is digested with one or more restriction enzymes to yield an identifying set of bands on a Southern blot probed with DNA corresponding to the DQ $\alpha$  class II HLA gene.

5 The sequences of the present invention can be used to provide polynucleotide reagents specifically targeted to additional loci in the human genome, and can enhance the reliability of DNA-based forensic identifications. Those sequences targeted to noncoding regions (see, e.g., Tables 8  
10 and 9) are particularly appropriate. As mentioned above, actual base sequence information can be used for identification as an accurate alternative to patterns formed by restriction enzyme generated fragments. Reagents for obtaining such sequence information are within the scope of  
15 the present invention. Such reagents can comprise complete ESTs or corresponding coding regions, or fragments of either of at least 15 bp, preferably at least 18 bp.

There is also a need for reagents capable of identifying the source of a particular tissue. Such need arises, for  
20 example, in forensics when presented with tissue of unknown origin. Appropriate reagents can comprise, for example, DNA probes or primers specific to particular tissue prepared from the ESTs or complete sequences of the present invention. Panels of such reagents can identify tissue by species and/or  
25 by organ type. In a similar fashion, these reagents can be used to screen tissue culture for contamination.

#### V. Production of Polypeptide Corresponding to ESTs

As previously explained, each EST corresponds not only  
30 to a coding region, but also to a polypeptide. Once the coding sequence is known, or the gene is cloned which encodes the polypeptide, conventional techniques in molecular biology can be used to obtain the polypeptide.

At the simplest level, the amino acid sequence encoded  
35 by the polynucleotide sequence can be synthesized using commercially available peptide synthesizers. This is

particularly useful in producing small peptides and fragments of larger polypeptides. (Fragments are useful, for example, in generating antibodies against the native polypeptide.)

5 Alternatively, the DNA encoding the desired polypeptide can be inserted into a host organism and expressed. The organism can be a bacterium, yeast, cell line, or multicellular plant or animal. The literature is replete with examples of suitable host organisms and expression techniques. For example, naked polynucleotide (DNA or mRNA)  
10 can be injected directly into muscle tissue of mammals, where it is expressed. This methodology can be used to deliver the polypeptide to the animal, or to generate an immune response against a foreign polypeptide. Wolff, et al., *Science* 247:1465 (1990); Felgner, et al., *Nature* 349:351 (1991).  
15 Alternatively, the coding sequence, together with appropriate regulatory regions (i.e., a construct), can be inserted into a vector, which is then used to transfect a cell. The cell (which may or may not be part of a larger organism) then expresses the polypeptide. (See Example 25.)

20 Antibodies generated against the polypeptide corresponding to a sequence of the present invention can be obtained by direct injection of the naked polypeptide into an animal (as above) or by administering the polypeptide to an animal, preferably a nonhuman. The antibody so obtained will  
25 then bind the polypeptide itself. In this manner, even a sequence encoding only a fragment of the polypeptide can be used to generate antibodies binding the whole native polypeptide. Such antibodies can then be used to isolate the polypeptide from tissue expressing that polypeptide.  
30 Moreover, a panel of such antibodies, specific to a large number of polypeptides, can be used to identify and differentiate such tissue.

## VI. Examples

35 Certain aspects of the present invention are described in greater detail in the non-limiting Examples that follow.

## EXAMPLE 1

cDNA Sequences Determined by Random  
Clone Selection: First set

5

## METHODOLOGY:

With reference to the data presented in Table 1, lambda ZAP libraries were converted en masse to pBluescript plasmids, transfected into E. coli XL1-Blue cells, and plated on X-gal/IPTG/ampicillin plates. A total of 1058 clones were picked at random from three human brain cDNA libraries: fetal brain, two-year-old hippocampus, and two-year-old temporal cortex (Stratagene catalog #936206, 936205, 935, respectively. Stratagene, 11099 N. Torrey Pines Rd., La Jolla, CA 92037). An analysis of these clones is summarized in Table I (see below) In addition, clones selected from the hippocampus library were also analyzed after subtractive hybridization with the fibroblast library. These results are listed in the "Hippocampus Subtracted" column of Table 1.

Templates for DNA sequencing were PCR products or plasmids prepared by the alkaline lysis method. About half of the templates prepared by PCR failed to yield an amplified fragment suitable for sequencing. This was primarily due to use of PCR conditions that minimized the need for further purification of the product but also selected against amplification of long inserts (5  $\mu$ l fresh or frozen overnight culture of E. coli carrying the pBluescript plasmid, 7.5  $\mu$ M each dNTP, and 0.1  $\mu$ M each primer for 35 cycles: 94°C, 40 sec; 55°C, 40 sec; 72°C, 90 sec). A further percentage of the PCR-generated templates failed to sequence, largely due to primer-dimer or other amplification artifacts. Qiagen™ columns improved the percentage of plasmid templates, increasing the yields of usable sequence from about 60% with a standard alkaline lysis protocol to over 90%. Overall, 117 PCR-generated templates and 497 plasmid templates resulted in usable sequence. Dideoxy chain termination sequencing reactions were performed with fluorescent dye-labeled M13

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universal or reverse primers. After a cycle sequencing protocol, carried out in a Perkin-Elmer thermal cycler, sequencing reactions were run on an Applied Biosystems, Inc. (Foster City, CA) 373A automated DNA sequencer. (Cycle sequencing was performed in a Perkin Elmer Thermal Cycler for 15 cycles of 95°C, 30 sec; 60°C, 1 sec; 70°C, 60 sec and 15 cycles of 95°C, 30 sec; 70°C, 60 sec with the Applied Biosystems, Inc. Taq Dye Primer Cycle Sequencing Core Kit protocol). Some sequencing reactions were performed on an ABI robotic workstation (Cathcart, *Nature* 347: 310 (1990) hereby incorporated by reference).

#### RESULTS:

Singe-run DNA sequence data were obtained from 609 randomly chosen cDNA clones. The number of clones sequenced from each library is summarized in Table 1. Double-stranded cDNA clones in the pBluescript vector were sequenced by a cycle sequencing protocol with dye-labeled primers and Applied Biosystems, Inc. 373A DNA Sequences. The average length of usable sequence was 397 bases with a standard deviation of 99 bases.

Subtractive hybridization has been used successfully to reduce the population of highly represented sequences in a cDNA library by selectively removing sequences shared by another library. (Schmid and Girou, *Neurochem.* 48: 307 (1987); Fargnoli et al, *Anal. Biochem.* 187: 364 (1990); Duguid and Dinauer, *Nucl. Acids. Res.* 18: 2789 (1990); Schweinfest, et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Travis and Sutcliffe, *Proc. Natl. Acad. Sci. USA* 85: 1696 (1988); Kato, *Eur. J. Neurosci.* 2: 704 (1990)). Subtractive hybridization was therefore tested as a way of enhancing the number of brain-specific clones in the hippocampus library by hybridizing the hippocampus library with a WI38 human lung fibroblast cell line cDNA library and removing the common sequences (Schweinfest et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Sive and St. John, *Nucl. Acids Res.* 16: 10937

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(1988)). Clones from this subtraction are listed in the column "Hippocampus Subtracted" in Table 1.

The EST sequences from this Example 1 are identified as SEQ ID NOS 1-315.

TABLE 1. cDNA Library Composition Determined  
By Random Clone Sequencing

-----cDNA Library-----

EST Category	Hippocampus		Hippocampus Subtracted		Fetal Brain		Temporal Cortex	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Databases Match--Human	48	12.8	10	8.6	3	7.9	6	7.5
Mitochondrial Genes	39	10.4	14	12.2	6	15.8	0	0
Repeats: Alu, Line-1, etc.	10	2.7	7	6.0	0	0	11	13.8
Ribosomal RNA	32	8.6	7	6.0	4	10.5	0	0
Other Nuclear Genes	32	8.6	7	6.0	5	13.2	4	5.0
Database Match--Other	160	42.8	44	37.9	20	52.6	6	7.5
No Database Match	53	14.1	24	20.7	0	0	27	33.7
poly A Insert	1	0.3	3	2.6	0	0	26	32.5
No Insert								

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## EXAMPLE 2

Sequencing of Additional ESTs: Second set

Over 2600 additional cDNA clones have been isolated, partially sequenced and screened. The clones were isolated from four human brain cDNA libraries. The new sequences thus discovered, together with the 315 brain ESTs from Example 1, correspond to over 2400 new human genes. These data represent an approximate doubling of the number of human genes identified by DNA sequencing.

Specifically, four cDNA libraries were used as sources of clones for sequencing. Human hippocampus and fetal brain libraries, plasmid template preparation, sequencing reactions, and automated sequencing were performed as described (Adams, M.D., Kelley, J.M., Gocayne, J.D., Dubnick, M., Polymeropoulos, M.H., Xiao, H., Merril, C.R., Wu, A., Olde, B., Moreno, R.F., Kerlavage, A.R., McCombie, W.R., & Venter, J.C. *Science*, 252: 1651-56 (1991)). A pooled probe consisting of inserts from 10 different EST clones with sequences that matched either mitochondrial genes or the 18S or 28S ribosomal RNAs was used to prescreen a gridded filter array of the hippocampus library; nonhybridizing clones are referred to as the "prescreened library". Another fetal brain library was constructed by and was a gift from Bento Soares (Columbia University). A directionally-cloned library was prepared using the method of Rubenstein, et al. (Rubenstein, J., Elizabeth, A., Brice, A., Ciaranello, R., Denney, D., Porteus, M. & Usdin, T. *Nucl. Acids Res.* 18: 4833-4842) using human adult brain mRNA purchased from Clontech (Palo Alto, CA; Catalogue # 6516-1). Of 482 clones analyzed by restriction enzyme digestion, 33% contained inserts at least 1500 base pairs in length. Stratagene hippocampus and fetal brain library totals include data from Adams et al *Science* 252: 1651.

Sequences of nuclear-encoded cDNAs that did not include interspersed repeats (Schmid, C. W. & Jelinek, W. R. *Science*



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216: 1065-1070 (1982); Paulson, K. E., Deka, N., Schmid, C. W., Misra, R., Schlinder, C. W., Rush, M. G., Kadyk, L., & Leinwand, L. *Nature* 316: 359-361 (1985); Fanning, T. G. & Singer, M. F. *Biochem. Biophys. Acta* 910: 203-212 (1987)) were searched against all of GenBank and, in 6-frame translation, against a comprehensive, non-redundant peptide database using the network BLAST (Altschul, S. F., Gish, W., Miller, W., Myers, E.W., & Lipman, D. J. *Mol. Biol.* 215: 403-410 (1990)) server at the National Center for Biotechnology Information. BLAST output was parsed, and an interactive alignment editor was used to select which matches, if any, from each search to record in a relational EST database, which was developed to track sequencing, identification, tissue localization, physical mapping, and the public distribution of the clones, mapping and sequence data. For significant similarities, a putative gene name and Protein Identification Resource (PIR) gene family identification (Barker, W., George, D., Hunt, L., & Garavelli, J. *Nucl. Acids Res.* 19 (Suppl): 2231-2236 (1991)) for the EST were assigned. ESTs without significant matches using BLAST were searched in translation against PIR using FASTA. Ten additional marginal matches were found. A total of 2300 new EST sequences comprising 765,505 nucleotides from the current data set have been submitted to GenBank and assigned accession numbers M77851-M79278 and M85308-M86179. All ESTs except those multiply representing actin, tubulin, and myelin basic protein clones were submitted. ATCC accession numbers of cDNA clones from which ESTs were derived are 77501-78999 and 81000-81756. The Genome Data Base expressed D-segment numbers for these clones are D0S1E - D0S2422E. The ESTs from this Example are identified herein as SEQ ID NOs 316-2407.

## EXAMPLE 3

EST Characterization: First Set

ESTs including SEQ ID NOS 1-315 were analyzed as follows. Initially, the EST sequences were examined for similarities in the GenBank nucleic acid database (GenBank Release 65.0), Protein Information Resource Release 26.0 (PIR), and ProSite (MacPattern from the EMBL data library, Fuchs R. *Comput. Appl. Biosci.* 7: 105 (1990) Release 5.0 were used). BLAST was used to search Genbank and the PIR (both maintained by the National Center for Biotechnology Information) ESTs without exact GenBank matches were translated in all six reading frames and each translation was compared with the protein sequence database PIR and the ProSite protein motif database. Comparisons with the ProSite motif database were done by means of the program MacPattern from the EMBL Data Library. GenBank and PIR searches were conducted with the "basic local alignment search tool" programs for nucleotide (BLASTN) and peptide (BLASTX) comparisons (Altschul et al, *J. Mol. Biol.* 215: 403 (1990)). PIR searches were run on the National Center for Biotechnology Information BLAST network service. The BLAST programs contain a very rapid database-searching algorithm that searches for local areas of similarity between two sequences and then extends the alignments on the basis of defined match and mismatch criteria. The algorithm does not consider the potential gaps to improve the alignment, thus sacrificing some sensitivity for a 6-80 fold increase in speed over other database-searching programs such as FASTA (Pegarson and Lipman, *Proc. Natl. Acad. Sci. USA*, 85: 2444 (1988)).

Sequence similarities identified by the BLAST programs were considered statistically significant with a Poisson P-value than 0.01. The Poisson P-value less than the probability of as high a score occurring by chance given the number of residues in the query sequence and the database.

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After the BLASTN search, 30 unmatched ESTs were compared against GenBank by FASTA to determine if significant matches were missed due to the use of BLASTN for the database search. No additional statistically significant matches were found. Statistical significance does not necessarily mean functional similarity; some of the reported matches may indicate the presence of a conserved domain or motif or simply a common protein structure pattern. Those ESTs identified as fully corresponding to known human genes or proteins are not included in this disclosure. Statistically significant matches are reported in Table 2, together with the length and percent identity or similarity of each alignment.

On the basis of database searches, 609 EST sequences were classified into eight groups as shown in Table 1 (see Example 1 above). Four groups, with 197 or 32% of the sequences, consist of matches to human sequences: repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes. Forty-eight (8%) of the sequences matched non-human entries in GenBank or PIR while 230 (38%) had no significant matches. The remaining 134 (22%) sequences contained no insert or consisted entirely of polyA between the EcoRI cloning sites.

Thirty-six ESTs matched previously sequenced human nuclear genes with more than 97% identity. Four of these ESTs are from genes encoding enzymes involved in maintaining metabolic energy, including ADP/ATP translocase, aldolase C, hexokinase, and phosphoglycerate kinase. Human homologs of genes for the bovine mitochondrial ATP synthase  $F_0F_1$ -subunit and porcine aconitase were also found (Table 2). Brain-specific cDNAs included synaptophysin, glial fibrillary acidic protein (GFAP), and neurofilament light chain. At least six ESTs are from genes encoding proteins involved in signal transduction: 2',3'-cyclic nucleotide 3'-phosphodiesterase (2 ESTs), calmodulin, c-erbA- $\alpha$ -2,  $G_{\beta}$ , and  $Na^+/K^+$  ATPase  $\alpha$ -subunit. Other ESTs were matches to genes for ubiquitous structural proteins -- actins, tubulins, and

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fodrin (non-erythroid spectrin). ESTs also document the presence in the hippocampus cDNA library of the ret proto-oncogene, the ras-related gene rhoB, and one of the chromosome 22 breakpoint cluster region transcripts. Eight  
5 ESTs are from genes known to be associated with genetic disorders (Online Mendelian Inheritance in Man). More than half of the human-matched ESTs from Example 1 have been mapped to chromosomes, indicating the bias of GenBank entries toward well-studied genes and proteins.

10 ESTs without significant GenBank matches were also compared to the ProSite database of recognized protein motifs. Not counting post-translational-modification signatures, fifty-four sequences contained motifs from the database. Some patterns, particularly the "leucine zipper",  
15 are found in scores or hundreds of proteins that do not share the functional property implied by the presence of the motif.

Similarities to sequences from other organisms were also detected in the BLAST searches of GenBank and PIR (Table 2). Several ESTs displayed similarity to "housekeeping" genes,  
20 including the ribosomal proteins S10 and L30 (rat) and the above glycolytic enzymes. EST00257 (SEQ ID NO:77) shows strong nucleotide sequence similarity to the squid (67%) and Drosophila (70.4%) kinesin heavy chain. Kinesin was first described as a microtubule-associated motor protein involved  
25 in organelle transport in the squid giant axon (Vale et al, Cell 42: 39 (1985)). Six oncogene-related sequences were also among the cDNA clones sequenced. EST00299 (SEQ ID NO:180) and EST00283 (SEQ ID NO:271) show similarity to several ras-related genes and EST00248 (SEQ ID NO:102)  
30 matched the 3' untranslated region of the bovine substrate of botulinum toxin ADP-ribosyltransferase. Similarities with an S. cerevisiae RNA polymerase subunit and Torpedo electromotor neuron-associated protein were also observed. Two ESTs may represent new members of known human gene families: EST00270  
35 matched the three  $\beta$ -tubulin genes with 88-91% identity and

EST00271 (SEQ ID NO:248) matched  $\alpha$ -actinin with 85% identity at the nucleotide level.

Among the most interesting of the primary sequence relationships was the similarity of ESTs to the Drosophila genes Notch and Enhancer of split. Nucleotide and peptide alignments of EST00256 (SEQ ID NO:188) and EST00259 (SEQ ID NO:227) with the Drosophila genes have been demonstrated. Both genes are part of a signal cascade encoded by the "neurogenic" genes that are involved in the differentiation of neuronal and epidermal cell lineages in the neuroectoderm of the developing Drosophila embryo (Campos-Ortega, **Trends in Neuro. Sci.** 11: 400 (1988)). It has been proposed that the Enhancer of split protein interacts with a membrane protein that is the product of the Notch gene to convert a developmental signal into an altered pattern of gene expression (id. **J. Mol. Biol.** 215: 403 (1990)). EST00256 (SEQ ID NO:188) matches near the 5' end of the Enhancer of split coding sequence, away from the mammalian G protein  $\beta$  subunit- and yeast cdc4-like elements (Hartley et al, **Cell** 55: 785 (1988); Klambt et al. **EMBO J.** 8: 203 (1989)). Part of the EST00259 (SEQ ID NO:227) match to Notch in the cdc10/SW16 region that is similar to three cell-cycle control genes in yeast and is tightly conserved in the Xenopus Notch homolog, Xotch. In Drosophila, Enhancer of split is absolutely required for formation of epidermal tissue. Notch contains several epidermal growth factor-like repeats and appears to play a general role in cell-cell communication during development (Banerjee and Zipursky, **Neuron** 4:177 (1990)).

Seven genes were represented by more than one EST. Comparisons of all the ESTs against one another revealed two overlaps of unknown ESTs: EST00233 (SEQ ID NO:32) and EST00234 (SEQ ID NO:8) match in opposite orientations and EST00235 (SEQ ID NO:204) and EST00236 (SEQ ID NO:148) match in the same orientation beginning at the same nucleotide. Five human genes were represented by more than one EST:  $\beta$ -

actin (3),  $\lambda$ -actin (2),  $\alpha$ -tubulin (2),  $\alpha$ -2-macroglobulin (2), and 2'3'-cyclic-nucleotide-3'-phosphodiesterase (2). Those few instances where two or more ESTs represent different portions of a single cDNA can be readily ascertained when the sequence of the full cDNA insert is determined in accordance with Example 13.

#### Example 4

##### EST Sequences Characterization: Second Set

The ESTs of Example 2, including SEQ ID NOs 316-2407, were screened against known sequences listed in GenBank and other databases, as in Example 3. The results are reported in Table 2. The quality of the match is given as percent identity and length in base pairs for nucleotide matches and amino acid residues for peptide matches. In many cases ESTs match multiple domains on several related proteins; for example, EST00825 matches two transmembrane domains on both GABA and Norepinephrine transporters. Nucleotide databases are: GenBank (GB), and EMBL (E); peptide databases are: GenPept (GPU), Swiss-Prot (SP), and PIR.

The great majority (83%) of the partial cDNA sequences reported in Example 2 are unrelated to any sequences previously described in the literature. Based on database matches to known genes from humans as well as from such evolutionarily distant organisms as *E. coli*, yeast, *C. elegans*, *Drosophila*, barley, *Arabidopsis*, rice, and green algae, we have preliminarily identified the functional type of a number of the ESTs (Table 2). These include a novel gene similar to Notch/Tan-1 (Adams et al., *supra*), a new neurotransmitter transporter gene, and a new member of the multi-drug resistance gene family. Several genes involved in development or cell differentiation in *Drosophila* are represented by similar human ESTs, including seven in *absentia* (Carthew, R. & Rubin, G. *Cell* 63: 561-577 (1990)),

big-brain (bib) (Rao, Y., Jan, L., & Jan, Y. *Nature* 345: 163-167 (1990)), the discs tumor suppressor (Woods, D. & Bryant, P. *Cell* 66: 1-20 (1991)), and the homeotic gene orthodenticle (Finkelstein, R., Smouse, D. Capaci, T., Spradling, A. & Perrimon, N. *Genes. Dev.* 4: 1516-1527 (1990)). New members of gene families previously known in humans include a  $\text{Ca}^{+2}$ -transporting ATPase, an ADP ribosylation factor, and a new neural-cell adhesion molecule gene.

The 1971 ESTs without a putative identification were analyzed using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. *Proc. Natl. Acad. Sci. USA* 88: 11261-5 (1991)). Fifteen percent of the unknown ESTs scored an excellent probability of containing protein-coding sequence. Fifty percent of the ESTs to known human genes contain protein-coding sequences, therefore, at most half of the unknown ESTs are likely to contain coding sequences. We have found no evidence that genomic DNA or cDNA to unspliced precursor RNA is a major contaminant of either the hippocampus or fetal brain library.

Table 2: ESTs Identified by Database Matches

SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID
208	EST00250	60K filarial antigen	A28209	PIR	108	56.9
2320	EST01784	60K filarial antigen	A28209	PIR	88	50.6
969	EST01982	ADP-ribosylation factor 1	B33283	PIR	84	41.2
1834	EST01620	AMP deaminase, brain	A37056	PIR	57	100.0
97	EST00289	Aconitase	A35544	PIR	105	90.6
251	EST00370	Actin, other	S10021	PIR	44	51.1
248	EST00271	Actinin, alpha	HUMACTAR	GB	271	85.3
891	EST01891	Actinin, alpha	HUMACTAR	GB	315	81.6
1500	EST02538	Actinin, alpha	HUMACTAR	GB	271	75.0
132	EST00110	Agrin	RATAGR	GB	269	82.2
1852	EST01625	Agrin	RATAGR	GB	103	84.6
1094	EST02113	Ala	HUMALA	GB	92	82.8
691	EST00675	Alcohol dehydrogenase	RICGOS2G_1	GPU	38	59.0
2408	EST00244	Amyloid A4	HUMAFPA4	GB	135	91.9
1965	EST01664	Amyloid A4	A29030	PIR	52	54.7
2068	EST01694	Amyloid A4	QRHUA4	PIR	83	69.0
2092	EST01700	Anion exchanger homolog AE3	A33638	PIR	95	97.9
1880	EST01634	Axonal glycoprotein TAG-1	A34695	PIR	69	87.1
1492	EST02530	B cell-specific Mo-MLV integration site 1 (bmi-1)	MUSBMI1A	GB	111	87.5
1277	EST02306	Bib protein	S09699	PIR	57	53.4
13	EST00255	Cadherins	CADN\$HUMAN	SP	41	45.2
1348	EST02378	cAMP-dependent protein kinase inhibitor	MUSPKI	GB	234	91.5
1931	EST01041	cAMP-regulated phosphoprotein	B35308	PIR	21	86.4
1413	EST02447	cAMP-specific phosphodiesterase	HUMPDEAA	GB	363	69.0
396	EST01443	CDPdiacylglycerol-serine O-phosphatidyltransferase	JH0368	PIR	33	41.2
1956	EST01663	Ca2+-transporting ATPase 2	B28065	PIR	125	88.9
1126	EST02146	Calbindin D28	RATCALBD28	GB	81	87.8
1039	EST02055	Calcium channel	S05054	PIR	33	67.6
1910	EST01645	Calmodulin	RATRCM1	GB	120	90.1
485	EST01466	Calmodulin-dependent protein kinase, type II, beta	A26464	PIR	93	98.9
913	EST01913	Clathrin coat assembly protein AP50 homolog	YSCYAP54_1	GPU	62	63.5
2004	EST01676	Cofilin	PIGCOFIL	GB	132	89.5
2400	EST01824	Cysteine-rich intestinal protein	GYRTI	PIR	56	66.7
1588	EST02633	D2223 repetitive DNA	HUMREP	GB	160	76.4
2192	EST01257	Diacylglycerol kinase, lymphocyte	S09156	PIR	44	42.2
1441	EST02477	Diamine acetyltransferase	ATDA\$HUMAN	SP	74	45.3
650	EST00642	Dilute (myosin heavy chain)	MUSDILUTE_1	GPU	27	100.0
2302	EST01779	Discs-large tumor suppressor	DRODLGA_1	GPU	53	63.0
188	EST00256	Enhancer of split	A30047	PIR	86	58.6
2289	EST01325	Fatty acid synthase	RATFAS	GB	98	79.8
310	EST00377	Fo ATPase beta subunit, mitochondrial	BOVMTASB	GB	293	85.4
1332	EST02362	GA binding protein, beta subunit	MUSGAC_1	GPU	86	90.8
1667	EST00825	Gamma-aminobutyric acid transporter	A35918	PIR	26	59.3
2217	EST01738	Gelation factor ABP-280	A37098	PIR	74	80.0
1412	EST02446	Glutamate-aspartate carrier protein	JV0092	PIR	57	37.9
1020	EST02034	Glutaminase	GLS\$RAT	SP	34	74.3
1885	EST01639	Histocompatibility antigen modifier 1	A37779	PIR	63	75.0
1495	EST02533	Hypothetical 43.5K protein	JU0319	PIR	43	52.3
2326	EST01791	Inositol-1,4,5-trisphosphate 3-kinase	JN0129	PIR	65	68.2
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

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724	EST01529	Interferon-induced 54K protein	IN4\$HUMAN	SP	76	70.1
1035	EST02051	J1 protein	MUSJ1PRO	GB	362	85.7
1229	EST02258	KUP protein	HUMKUPMR_1	GPU	54	36.4
993	EST02007	Kinase 5 protein	CHKCEK5_1	GPU	68	94.2
77	EST00257	Kinesin	A35075	PIR	57	86.2
78	EST00258	Kinesin	A35075	PIR	62	47.6
2245	EST01748	Kinesin	A35075	PIR	98	52.5
2282	EST01764	Lamin B receptor	A36427	PIR	76	71.4
2173	EST01724	Lon protease	JQ0901	PIR	103	41.3
1427	EST02463	Long-chain-fatty-acid-CoA ligase	A36275	PIR	36	62.2
313	EST00276	Lysosomal membrane glycoprotein 1 (LAMP-1)	A31959	PIR	53	46.3
161	EST00247	MARCKS (myristoylated alanine-rich protein kinase	BOVMARCKS	GB	139	83.6
1386	EST02418	MARCKS homolog	MMF52	EU	237	92.4
769	EST00734	MARCKS homolog	S08341	PIR	61	40.3
43	EST00371	Maternal G10 protein	S05955	PIR	38	92.3
1468	EST02505	Matrin 3	RATMATRIN3	GB	137	93.5
639	EST00632	Membrane transport superfamily (GTP-dependent)	A24400	PIR	63	39.1
1894	EST01643	Membrane transport superfamily (GTP-dependent)	A24400	PIR	71	50.0
824	EST01865	Microtubule-associated protein 1B	RATNEU	GB	293	86.4
223	EST00368	Microtubule-associated protein 1B	A33645	PIR	30	54.8
2032	EST01683	Microtubule-associated protein 1B	A33645	PIR	49	62.0
2017	EST01678	Milk fat globule membrane protein	A36479	PIR	48	61.2
1704	EST01580	Myeloid differentiation primary response gene MyD1	MUSMYD118_1	GPU	76	88.3
2226	EST01744	NAD(P) + transhydrogenase (B-specific)	DEBOXM	PIR	86	93.1
1567	EST02610	Neural cell adhesion molecule L1	S05479	PIR	82	43.4
506	EST01471	Neuraxin	S06017	PIR	120	84.3
1566	EST02609	Neutrophil oxidase factor	A34855	PIR	43	47.7
952	EST01961	Notch/Xotch	HUMTAN1_1	GPU	85	57.0
227	EST00259	Notch/Xotch	A35844	PIR	74	85.3
1395	EST02429	Nuclear factor 1-like protein (NF1)	HAMNF1A	GB	111	92.0
1681	EST01573	Nucleoside diphosphate kinase	A33386	PIR	71	52.8
346	EST01828	Otd homeotic protein	A35912	PIR	35	52.8
2254	EST01751	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase	A28807	PIR	40	90.2
1869	EST00992	Polymyxin B resistance	A32714	PIR	20	76.2
93	EST00287	Processing enhancing protein	S03968	PIR	96	58.8
2353	EST01806	Prohibitin	RATPROHIB_1	GPU	120	97.5
2297	EST01775	Prohormone cleavage enzyme	MUSMPC1A_1	GPU	91	93.5
9	EST00376	Prolyl endopeptidase	PIGPREP	GB	223	83.9
1069	EST02087	Protein kinase C, zeta	HUMPKCL	GB	382	58.7
1933	EST01650	Protein phosphatase 2A beta subunit	HUMPROP2A8	GB	288	76.8
202	EST00298	Protein-tyrosine phosphatase LRP	LRP\$MOUSE	SP	62	44.4
1654	EST01572	Protochlorophyllide reductase	S04783	PIR	34	57.1
38	EST00374	RNA polymerase II 6th subunit (RPO26)	A36352	PIR	72	75.3
1478	EST02515	Rab5	F34323	PIR	91	82.6
2368	EST01389	Radial spoke protein 3	S05962	PIR	58	52.5
37	EST00038	ras p21-like small GTP-binding protein (smg GDS)	BOVSMGGDS	GB	131	89.4
180	EST00299	ras-related proteins	S10493	PIR	51	46.1
1700	EST01579	Retrovirus-related gag polyprotein	FOHUE2	PIR	95	77.1
1511	EST02550	Retrovirus-related pol polyprotein	GNLJGL	PIR	50	54.9
102	EST00248	rho H12/ ARH12	BOVBGBRH	GB	195	79.6
1715	EST01583	Ribosomal protein L18a	R5RT18	PIR	68	95.7
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

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1856 EST01627 Ribosomal protein L1a	A24579 PIR 75 63.1
1974 EST01667 Ribosomal protein L3	JQ0771 PIR 74 80.0
301 EST00300 Ribosomal protein L30	R6RT30 PIR 57 96.5
22 EST00301 Ribosomal protein S10	R3RT10 PIR 66 97.0
2402 EST01826 Ribosomal protein S10	R3YM10 PIR 36 51.4
463 EST01459 Ribosomal protein YL10	S11581 PIR 40 68.3
1408 EST02442 Seven in absentia	A36195 PIR 46 80.8
299 EST00249 smg p25A GDP dissociation inhibitor	A35652 PIR 97 77.5
951 EST01960 Spectrin, beta	HUMSPTB GB 268 67.7
2089 EST01699 Sperm membrane protein	A35981 PIR 52 58.5
2073 EST01697 Succinate dehydrogenase flavoprotein	BOVSDHFP1_1 GPU 44 100.0
2138 EST01715 Succinate dehydrogenase flavoprotein	BOVSDHFP1_1 GPU 49 92.0
430 EST00472 Synaptotagmin (p65)	SY65\$HUMAN SP 27 53.6
1371 EST02402 Talin	MUSTALINR_1 GPU 79 81.2
1771 EST01601 Thiosulfate sulfurtransferase (rhodanese)	ROBO PIR 65 81.8
300 EST00232 Transforming protein (db1)	TVHUDB PIR 25 65.4
189 EST00282 trkB	A35104 PIR 33 67.6
653 EST01512 Tubulin, alpha	HUMTUBAG GB 223 75.0
594 EST01490 Tubulin, beta	HUMTB85 GB 298 93.6
757 EST01542 Tubulin, beta	HUMTUBBM GB 217 90.4
1245 EST02274 Tubulin, beta	A26561 PIR 105 88.7
1147 EST02169 Tyrosine kinase	HUMECK GB 384 74.3
1701 EST00853 Unc-104	JN0114 NR 36 45.0
2121 EST01711 Valine-tRNA ligase	A29871 PIR 56 57.9
187 EST00152 Wilm's tumor-related protein	HUMQM GB 228 99.6
1726 EST01588 XPR2 alkaline extracellular protease	B26955 PIR 88 46.1
249 EST00275 Zinc Finger Proteins	S06551 PIR 25 57.7
413 EST01446 Zinc Finger Proteins	S00754 PIR 45 60.9
469 EST01460 Zinc Finger Proteins	C32891 PIR 34 54.3
833 EST01560 Zinc Finger Proteins	S00754 PIR 105 67.0
1230 EST02259 Zinc finger proteins	S00754 PIR 71 62.5
1496 EST02534 Zinc finger proteins	A34612 PIR 50 45.1
2324 EST01352 Zinc Finger Proteins	S10397 PIR 29 56.7

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There is little redundancy in EST sequencing according to the present invention. Of the nuclear-encoded messenger RNAs, the most common ESTs were to the  $\beta$ -actin (0.6% of the EST clones) and myelin basic protein genes (MBP, 0.5% of the clones). MBP, a highly expressed structural component of nerve tissue (Kamholtz, J., de Ferra, F., Puckett, C., & Lazzarini, R. *Proc. Natl. Acad. Sci., USA* 83: 4962-4966 (1986)), displays four alternate splicing forms, of which at least two are present among the ESTs reported here. Other common ESTs were Gs-alpha gamma-actin and both a- and alpha-tubulin.

By matching ESTs to known database sequences, a phenotypic characterization of the tissue begins to emerge. Protein superfamilies matched by ESTs were grouped into three broad functional categories to assess the biological spectrum represented by these randomly selected cDNA clones. Structural and metabolic classes comprised about 30% of the ESTs with database matches. Twenty-five percent were involved in regulatory pathways and the remainder were not classifiable. Eleven of the eighteen enzymes of glycolysis and the citric acid cycle are represented by at least one subunit or isozyme. In addition, several genes not previously known to be expressed in the brain were matched, including spermine/spermidine acetyltransferase (Casero, R., Celano, P., Ervin, S., Applegren, N., Wiest, L. & Pegg, A. *J. Biol. Chem.* 266: 810-814 (1991)) and osteopontin (Young, M., Kerr, J., Termine, J., Wewer, U., Wang, M., McBride, W. & Fisher, L. *Genomics* 7:491-502 (1990)).

#### EXAMPLE 5

##### Mapping of ESTs to Human Chromosomes

Randomly selected ESTs corresponding to SEQ ID NOs. were assigned to chromosomes via PCR (see Table 3). Oligonucleotide primer pairs were designed from EST

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sequences to minimize the chance of amplifying through an intron. The oligonucleotides were 18-23 bp in length and designed for PCR amplification using the computer program INTRON (National Institutes of Mental Health, Bethesda, MD). The program is based on the assumptions that: 1) introns are genomic sequences that interrupt the coding and noncoding sequences of genes (Smith, J. Mol. Evol. 27:45-55 (1988)); 2) there are consensus sequences for splice junctions (Shapiro, et al., Nucl. Acids Res. 15:7155-7174 (1987)); and 3) that 90% of the human genes studied have 3' untranslated regions of mRNA not interrupted by introns in the genomic DNA (Hawkins, Nucl. Acids Res. 16:9893-9908 (1988)).

The program evaluates the likelihood that a given GG or CC dinucleotide represents a former exon-intron boundary. Specifically, every input strand is processed by the INTRON program twice, first evaluating the sense mRNA strand, and then processing the complementary or anti-sense strand. The program evaluates each sequence by finding all GG or CC pairs (possible former splice sites), searching for STOP codons in all three reading frames, and analyzing the GG or CC pairs surrounded by stop codons. All regions of the EST that are unlikely to contain splice junctions based on CC content, GG content, and stop codon frequency are then marked by the program in uppercase.

The creation of PCR primers from known sequences is well known to those with skill in the art. For a review of PCR technology see Erlich, H.A., PCR Technology; Principles and Applications for DNA Amplification. 1992. W.H. Freeman and Co., New York. ESTs were examined for the presence of stop codons in each reading frame and for consensus splice junctions. The presence of stop codons and absence of splice junction sequences are more characteristic of 3' untranslated sequences than of introns. The untranslated sequences are unique to a given gene; thus, primers from

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these regions are less likely to prime other members of a gene family or pseudogenes.

5 The primers were used in polymerase chain reactions (PCR) to amplify templates from total human genomic DNA. PCR conditions were as follows: 60 ng of genomic DNA was used as a template for PCR with 80 ng of each  
10 oligonucleotide primer, 0.6 unit of Tag polymerase, and 1 uCi of a <sup>32</sup>P-labeled deoxycytidine triphosphate. The PCR was performed in a microplate thermocycler (Techne) under the following conditions: 30 cycles of 94°C, 1.4 min; 55°C, 2 min; and 72°C, 2 min; with a final extension at 72°C for 10 min. The amplified products were analyzed on a 6% polyacrylamide sequencing gel and visualized by  
15 autoradiography. If the size of the resulting product was equivalent to the EST from which the primers are derived, then the PCR reaction was repeated with DNA templates from two panels of human-rodent somatic cell hybrids; BIOS  
PCRable DNA (BIOS Corporation) and NIGMS Human-Rodent Somatic Cell Hybrid Mapping Panel Number 1 (NIGMS, Camden,  
20 NJ).

PCR was used to screen a series of somatic cell hybrid cell lines containing defined sets of human chromosomes for the presence of a given EST. DNA was isolated from the somatic hybrids and used as starting templates for PCR  
25 reactions using the primer pairs from EST sequences selected above. Only those somatic cell hybrids with chromosomes containing the human gene corresponding to the EST will yield an amplified fragment. ESTs were assigned to a chromosome by analysis of the segregation pattern of  
30 PCR products from hybrid DNA templates. For a review of techniques and analysis of results from somatic cell gene mapping experiments. (See Ledbetter et al., *Genomics* 6:475-481 (1990).) The single human chromosome present in all cell hybrids that give rise to an amplified fragment  
35 represents the chromosome containing that EST.

The assignment of 100 ESTs and corresponding genes to chromosomes by PCR is shown in Table 3.

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Table 3: Assignment of ESTs to Chromosomes by PCR

SEQ ID	EST#	Chr	PRIMER #1	PRIMER #2
5	EST00012	1	TCCAGGCAATCCCAGAATAG	CTAATTGAGCTCACTGGCCC
57	EST00058	1	CTGTTTGCAAGTTTCAAAGC	GCCATTTCTAACAACCAGAG
64	EST00066	1	GCCATTGTGCTGAATAGAGT	GTTAGTGTTCCTTAGCAAG
83	EST00079	1	CAGCTAATTGACCTGGGCTA	CAACATGCTCTGAGCTTTAG
83	EST00079	1	GGCAGAGCATAATGAGTATA	CATATGCATATGGTCCCTAT
91	EST00086	1	AGTTTAGATGGAGGGCTGTC	TCTGCCCTAATGCGCAGGCT
105	EST00365	1	CTTAATCACCTCCCTTTTGT	CCTTAGTTGGAGATAAGGTC
109	EST00095	1	AGTCTAATCCTGTACACTTG	CGGGCTTTCTCTGAATTGGT
116	EST00100	1	TTAGAAGTGCCCATGGGAGG	TTTAAAGGCTCTGGAGTGT
141	EST00118	1	CTCAGAGAACTTAGGTGAA	CTACAGAATCATTTCACCAG
220	EST00372	1	AAGTTGCACATTGCCCAAGG	ATAGTACTGCAAGGTTATTC
237	EST00187	1	TTACAAATTTCTCTTGACGC	CTGAAGGAGCACAGTTTCTC
242	EST00192	1	GGATCAGATAATCAAACAGG	GCTTAGGATATGAATGCATA
259	EST00202	1	GCATCACAGTTTAACTGAGG	CTACATATTTGTGCTCCTT
269	EST00293	1	CTGTTGCTGTGCAGTAGCTT	CTTTTGACCCAGTGAAACTT
299	EST00249	1	GATCATGCAGACGTAGATAT	CCAACCTCTGCCAGATCATT
1651	EST00810	1	TAGTCGCTGTAAGTTGATTC	GCTTTGCTGGATGCTTCATT
16	EST00021	2	CAGGCAAGTTTCTTCCAGGA	TCAGACCCATGGTCAGCTT
1898	EST01013	2	GGCTGAGAACGGTTAGCATA	CCCTCAGCTTAGGGGAATG
8	EST00234	2	TAGAAGGCAAACTATGTCCC	GGTGAGGATTGGCTTTTAC
36	EST00037	2	AGCCAGAAGGCTGCTTAAAG	GCAGTGAACCAGTACTCCTA
123	EST00106	2	GTCTAATTTGTAACTTCAG	GATAGATTGTATAAGAAGCC
192	EST00155	2	GATTTATGTCTGGGAATAA	GCAGCATGTGAAAGAATGAT
200	EST00162	2	TTTAATGGGTGGTGGGAGCT	CGATGCACATCCTTCTCCAT
284	EST00216	2	CCTAAGAATTCGTTTGGCTC	GTCTGGCACATAATAGATTG
102	EST00248	3	ATACTACATCTAGTCTGG	TTACAGTTCTGTGGTTTC
167	EST00138	3	AAACAGCTGCGGAGTACA	AAAGGATCCTCCACTCCAGA
12	EST00274	3	CCTAGCAAACTCATACACAC	CATAAGTGAATGGACACAGG
60	EST00062	3	ACACATTAACGGTGCTGCAG	GGAATCAGCCCTTGAGGACT
77	EST00257	3	AAGCTCACAACGCAGATCTG	CTGGAACAGCTTACAAAGGT
107	EST00093	3	ATTGAACTCTGTCAACAGTG	TGTAAACAAAGGCCAAACT
108	EST00094	3	AL2 - GCAGGATGTGAGTCTTTGAG	AGCACACATTATCTACCACGGC
1706	EST00857	3	AL2 - GCAGGATGTGAGTCTTTGAG	CCAGCACACATTATCTACCACG
37	EST00038	4	AACTTCGCAGTCATGAGAAC	TGTATCGGGCAGTTCTCAG
6	EST00013	4	CACATGTTCTCCCTCTTTCA	GCATTTTGGAGCTCTTCCGT
37	EST00038	4	AL2 - GGAAGTACAGGATTTGGC	TTAGAGATGGGATGATGCCG
31	EST00033	5	TGGGTACCCTAAGGTGTTTG	GACTAATCTAAGGTCTAGG
28	EST00030	5	AGATAAGTTAGGAAGCTGGT	ACTCACTGCTAGTATCATCC
59	EST00061	5	AAAGTTTCTTAGCACCCCCC	CAGACTTTGACAAAAGAATC
74	EST00073	5	ATCAGACACGTGGCAGGGTT	AAGTCCCTGAGGGTGCAGAA
121	EST00104	5	TGAAGGCAGCTGCTAAATCT	GGATGTATTGATCTGACTCA
149	EST00123	5	ATACTGTCAACGGAGGGTGA	GTCTGCAGGTTTCTCCTTGA
235	EST00185	5	TTACTGTCCCATCAGATATC	TACACTCTTAAAGAAGGTATG
1643	EST00803	5	GAGCGTTTAAAAGAGATTCT	TACAGACAGCCATGTTCCAA
1677	EST00835	5	AL2 - TCTCCAACACAGTCATGC	CGGATGCCATCATATACC
23	EST00026	5	CCTGCAGTGACACTTAACAT	CTGCTCACCTGAAATTGATAC
121	EST00104	5	AL2 - CAGATCAATACATCCTCTGGG	CTGTGCAGTGGTGAGTAAAGG

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SEQ ID	EST#	Chr	PRIMER #1	PRIMER #2
1	EST00007	6	TAGTTGATGGTCTGGGTTAT	GAAATCCCAGGGAGACAATG
19	EST00023	6	CAACTTACATTAGGGGTTTG	GACCTCATTAGAAGAGCCCA
155	EST00129	6	GGAAGCTGCCATATAAGCTC	TCAGTGTGCTACAATCTACC
224	EST00356	6	GCTGTATGTTAACCCTTTGT	TGGAACCCTCAAACACTGCT
288	EST00219	6	ACTTTCATGTTGAGAAGTAT	ATCTAGCTGAAACATTGCTG
1638	EST00798	6	CTTCATCTGTTAACTGTTGA	TGAAAATGAGTCACAGGCAG
1675	EST00833	6	AL2-ACCCAGTTCTCAAAGACC	GGTTTACCATTTCAGAGGC
22	EST00301	6	CTCCGTGATTACCTTCATCT	TTGTAGGTATCTCTGTCTAGCT
207	EST00167	7	GGTGCTACTTTGTGAATGCT	AGCAATGTGATTTTGTAGG
137	EST00272	7	AGTGGTCACTATCTACATGG	GATTGAGAATTACTAAGCCG
1659	EST00817	7	TGTATAGGCTCTACATAAAG	CTTAATCATGGATTCTTTCGT
1680	EST00838	7	AL2-GTTCTTTCCCAGGTATGC	TTGTTGGTACTGAGGAAGTGCG
292	EST00223	8	TGCAGCAGTGACCATGAGAA	ATCATCTTTCCACGCGGCTT
134	EST00375	9	TCTGGGCTTCTGTGGTTCAA	CTGGCTGCTCAGCAACTCAT
1906	EST01021	9	GGATGTTTTCTATGTGACGA	TTCCAGTGCCCTTTTGTCC
1645	EST00804	10	CTCCTTTGGGACAAACAAC	CCAACCCAAACATATTCTA
20	EST00024	10	AGCTGTTCTCTGAGAGATGCA	CCTTGTAAGAAAGACTTTC
157	EST00131	10	TCAGCAACAGGTCACCTTGG	CTAAGCATCTGCATGCTCAG
172	EST00142	10	TACTAGCATTTCTTACTCTC	TATGCTGATTGTTTGCACCTC
250	EST00197	10	GGTGATTAGAGAGTCTGTTG	GAACCTGTAGTGTCTTAAA
133	EST00111	11	GGAAATTAGGCTTAGCTCAC	GTGCAGAATACTTAGAGTCC
178	EST00294	11	GTTTGAAGGAAGTGATTTCC	TAGGGCCACCTCCAGTTTCAT
10	EST00016	11	GTCTTTGGATTCTACGTAGA	CGATAATGACATTTCTTCTGG
126	EST00109	11	AL2-CTAACCACAACCCACACATTG	CCTCAGCACAAGAGAAGAATGG
7	EST00014	12	AACTTGCAACATAAATACTAG	GAGCAATGATTTCTAACAGT
254	EST00200	13	TTGTGTACTGTCTGATAGAC	TAAGCCATGGGCATCTATAA
2409	EST00273	13	GCAAGATGATGGAACATCCC	TTCTTCTGGAGGCTCTACA
170	EST00295	14	GGTGCTTAAGGCCACTTTTG	CTTAGAGGATCATAGGTCTG
255	EST00201	14	CCAGGAGAGTAAGAAGATCA	GCAGAGTTGAATATGAACCT
290	EST00221	14	GTGCCAAGATGGCTCATGTA	GTATAGCTTTAAGCCAGTTC
293	EST00224	14	AATGCATTATGCCTGGTCTT	GGAAAAGTCTAGAACTTAGT
1664	EST00822	14	GGGTCAGAAATTAAGAGGTCT	GTTTCATCTCTAACTCCTTTC
315	EST00008	14	AAGCTGGCTGGGAAATGTTT	GTCATGCTAGTAACTTACAC
1689	EST00845	14	AL2-AGGAGGAAGCTGAAATCC	GGAAGTCCATAAGAGACTCACC
95	EST00088	15	GTGACAGACCATGTCTATTG	AAGTGAGCGATTGCACCTTC
205	EST00165	15	AGGATGACCTGAGTGAGCTG	CCATGGCAGCAAGGAACCTCT
33	EST00034	16	TGTGTGAAAGGGAGTCTTGT	CCATTTTGACTGTTCCATAG
247	EST00279	16	TGGCTAGGGCAGGCCTTAAA	GAGAAGAATATCAAATGGGG
18	EST00373	16	CCATCTGTGTCCCAATTAAGC	AGGGAAGAAGTCTAGAGCGA
68	EST00068	17	CAAAGACGGGAGACGAATGA	AGTGGAACGCGTGCCCTATG
1652	EST00811	17	GAGCTGCATGTTGATAAGTA	TTGACTTAAGCTGACCTTAA
1702	EST00854	17	AL2-TTGCTGTGGAATCCATGAGAG	GGCAAGTGATCTGTTCTTGG
84	EST00080	19	AGAGATGTCAGTCCATTATC	CTATTCCACCTTACTCAAGG
223	EST00368	19	CATCATGTGCGGAGACGCATT	TGGATGACCTGAGTCTGCAG
21	EST00025	20	AGTTCTGGAGGCTAGGAGTT	ATGTAAGGACCCCTAGATGG
210	EST00168	20	TGTCAACTTCCCTTTGGCCT	GAAGCTTGCTCATTACAGGAA
136	EST00113	20	AL2-TCGGAGAAGTTGCAGTTTCTG	GTTAAAGCTGTTAGACGGGGC
120	EST00103	22	CACTGACTGACTCCTCTTTA	GGAACCGTAACCTCCATAG
313	EST00276	X	ATTGACCTTCAATGTAATAA	TTGGATTGGGCAAAATAG

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<u>SEQ ID</u>	<u>EST#</u>	<u>Chr</u>	<u>PRIMER #1</u>	<u>PRIMER #2</u>
162	EST00133	X	ATGTGAGCATCTATACCTGC	AATGAAGGCATGAGAATAGG
1669	EST00827	X	CGGACAACTAGGATAAATGC	TACGCGTTTGAATGGCTTGA
1917	EST01029	X	GAATAGCATTATTAGCCAGT	GGACCTATTGGAGATCTACT
1708	EST00858	X	AL2-AAGGCGAGGATTATGTGC	TTCTACTGGGTACACTTCGACC

Abbreviation: AL2: Amino-Link-2 Fluorescent Tag, Chr.: Chromosome.

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The foregoing techniques have been used to further localize 9 ESTs and their associated genes to precise locations onto chromosome 6 or chromosome X, as reflected in Table 4A (in Example 7 below), using sublocalization techniques that employ somatic cell hybrids. ESTs were used as hybridization probes and mapped to other chromosomes using techniques disclosed in Example 7. Somatic cell hybrids were prepared that contained defined subsets of chromosomes 6 and X. Methods for preparing and selecting somatic cell hybrids are known in the art. For a review of an exemplary procedure to generate somatic cell hybrids containing the short arm of human chromosome 6, see Zoghbi, et al., *Genomics* 9(4):713-720 (1991). For a general review of somatic cell hybridization see Ledbetter et al. (*supra*). The hybrids were processed to obtain DNA and analyzed by PCR and by fluorescence in situ hybridization. SEQ ID NOS 19, 22, 1, 224, 288 mapped to chromosome 6, while SEQ ID NOS 162, 1917, 1699 and 1899 mapped to chromosome X using somatic cell hybrids.

#### EXAMPLE 6

##### Mapping of All ESTs to Human Chromosomes

The procedure of Example 5 is repeated for all of the ESTs from Examples 1 and 2 not previously mapped to human chromosomes. Data are generated corresponding to the data in Table 3 for all of the unmapped ESTs. As previously mentioned, virtually all of the ESTs will map to a unique chromosomal location. The inability of any ESTs to localize to a unique location will be readily ascertainable during the mapping process.

Physical mapping of the type reported in Table 4 on all the EST clones reported here would provide human chromosome markers spaced on average every 1.2 megabases and would roughly double the number of expressed sequences that have been localized to chromosomes (McKusick, V. FASEB

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J. 5: 12-20 (1991)). Mapped ESTs are also a new resource to identify candidates for the estimated 5000 single-locus disease-associated genes (Id.).

#### EXAMPLE 7

5        Alternative Technique for Mapping to Chromosomes  
      Mapping of ESTs to chromosomes using fluorescence in situ  
          hybridization

10        This technique was used to map an EST to a particular location on a given chromosome. Cell cultures, tissue, or whole blood were used to obtain chromosomes.

      0.5 ml. of whole blood was added to RPMI 1640 and incubated 96 hours in a 5%CO<sub>2</sub>/37°C incubator. 0.05 ug/ml colcemide was added to the culture one hour before harvest. Cells were collected and washed in PBS. The suspension was  
15        incubated with a hypotonic solution of KCl added dropwise to reach a final volume of 5 ml. The cells were spun down and fixed by resuspending the cells in methanol and glacial acetic acid (3:1). The cell suspension was dropped onto glass slides and dried.

20        The slides were treated with RNase A and washed then dehydrated in a series of increasing concentrations of ethanol.

      The EST to be localized was nick-translated using fluorescently labeled nucleotide (Korenberg, Jr., et al.,  
25        Cell 53(3):391-400 (1988)). Following nick translation, unincorporated label was removed by spin dialysis through Sepharose. The probe was further extracted with phenol-chloroform to remove additional protein. The chromosomes were denatured in formamide using techniques known in the art  
30        and the denatured probe was added to the slides. Following hybridization, the cells were washed. The slides were studied under a fluorescent microscope. In addition, the chromosomes can be stained for G-banding or Q-banding using techniques known in the art.

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The resulting metaphase chromosomes had fluorescent tags localized to those regions of the chromosome that were homologous to the EST. Thus, a particular EST was localized to a particular region on a given chromosome. In this manner, SEQ ID NOs 396, 485, 506, 1880 and 1894 were mapped using fluorescent in situ hybridization to locations on chromosomes 17, 7, 10 and 1 respectively (See Table 4B below). For a review of the technique see Verma et al., *Human Chromosomes: A Manual of Basic Techniques*. Pergamon Press, NY (1988), which is hereby incorporated by reference.

Table 4: Precise Chromosomal Localization of ESTs

	SEQ ID	EST#	Map Location
	-----	-----	-----
15	A.	19	EST00023 6p
		22	EST00301 6p
		1894	EST01643 6p21
		1	EST00007 6q
		224	EST00356 6q
		288	EST00219 6q
		162	EST00133 Xp11.21 - Xp21.2
20		1917	EST01029 Xp11.21 - Xp21.2
		1669	EST00827 Xq26 - Xq27.1
		1899	EST01014 Xq28
25	B.	1880	EST01634 1q32
		485	EST01466 7p13
		506	EST01471 10q11.2
		396	EST01443 17q25

## EXAMPLE 8

Automated DNA Sequencing Accuracy

ESTs that match human sequences in GenBank are excellent tools for the analysis of the accuracy of double-strand automated DNA sequencing. Ninety EST/GenBank matches were examined for the number of nucleotide mismatches and gaps required to achieve optimal alignment by the Genetics Computer Group (GCG) program BESTFIT (Devereux et al, *Nucleic Acids Research* 12: 387 (1984)).

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5 The number of mismatches, insertions and deletions was counted for each hundred bases of the sequence (Table 5). As expected, the sequence quality was best closest to the primer and decreased rapidly after about 400 bases. The number of deletions and insertions relative to the GenBank reference sequence increased five- to ten-fold beyond 400 bases, while the number of mismatches doubled. The average accuracy rate for individual double-stranded sequencing runs was 97.7% to 400 bases.

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TABLE 5. Accuracy Of Single-Run Double-Stranded Automated Sequencing

<u>Bases from Primer</u>	<u>Mismatches/ Ambiguities</u> <sup>+</sup>	<u>Gaps Insertions</u> <sup>+</sup>	<u>Percent Deletions</u> <sup>+</sup>	<u>Aligned Accurate</u>	<u>Bases</u>
101 - 200	1.45	0.18	0.19	98.2	8,800
201 - 300	1.72	0.25	0.11	97.9	8,130
301 - 400	2.07	0.98	0.37	96.6	5,404
>400	3.53	2.63	1.06	92.8	3,197

ESTs statistically identical to known human sequences and those matching mitochondrial and ribosomal genes were aligned with sequenced from GenBank using the GCG program BESTFIT. The first 85 nucleotides was polylinker sequence which was not aligned with the pBluescript SK reference sequence. Tabulation of errors began 15 bases into the BESTFIT alignment and thus is reported beginning with bases 101-200. <sup>+</sup>Error rates are reported as number of mismatches, insertions, or deletions per hundred aligned bases. "Mismatches" includes ambiguous base calls.

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## EXAMPLE 9

Probability of ESTs Containing Coding Sequences

5 The ESTs of the present invention were statistically  
evaluated using the coding-region prediction program CRM  
via the GRAIL server (Uberbacher, E. & Mural, R. Proc.  
10 Natl. Acad. Sci. USA, 88: 11261-5 (1991)). The CRM program  
uses a neural network to combine results from several  
different coding regions by looking at different 6 bp  
sequences found in coding exons and in introns. The  
program additionally conducts reading frame searches and  
assesses randomness at the third position of codons. This  
15 protocol categorizes sequences as having an excellent,  
good, marginal, or poor probability of containing coding  
regions. The results are reported in Tables 6-9. There  
were 219 ESTs categorized as "excellent" (Table 6); 120  
categorized as "good" (Table 7); 113 categorized as  
"marginal" (Table 8); and 1743 categorized as "poor" (Table  
9). These results indicate that most ESTs of the present  
invention comprise noncoding regions.

Table 6: ESTs with Excellent Probability of Containing Coding Sequence

SEQ ID#	EST#				
7	EST00014	973	EST01987	1807	EST00941
15	EST00020	979	EST01993	1809	EST00943
48	EST00291	980	EST01994	1820	EST00951
62	EST00064	986	EST02000	1829	EST00958
66	EST00067	1000	EST02014	1849	EST00975
75	EST00074	1004	EST02018	1860	EST00983
98	EST00260	1007	EST02021	1866	EST00989
106	EST00092	1018	EST02032	1871	EST00994
108	EST00094	1021	EST02035	1888	EST01005
114	EST00098	1034	EST02050	1890	EST01007
115	EST00099	1047	EST02063	1892	EST01009
124	EST00107	1090	EST02109	1903	EST01018
128	EST00252	1096	EST02115	1904	EST01019
156	EST00130	1115	EST02135	1914	EST01026
164	EST00135	1118	EST02138	1930	EST01040
166	EST00137	1129	EST02149	1944	EST01050
174	EST00296	1133	EST02153	1949	EST01054
179	EST00145	1141	EST02163	1962	EST01062
183	EST00148	1163	EST02187	1973	EST01071
201	EST00163	1183	EST02208	1977	EST01075
205	EST00165	1243	EST02272	1982	EST01080
215	EST00172	1264	EST02293	1991	EST01088
230	EST00181	1265	EST02294	1993	EST01090
253	EST00199	1266	EST02295	2000	EST01097
263	EST00203	1287	EST02317	2001	EST01098
268	EST00369	1308	EST02338	2012	EST01106
270	EST00207	1324	EST02354	2013	EST01107
271	EST00283	1344	EST02374	2024	EST01117
273	EST00208	1356	EST02386	2043	EST01131
276	EST00211	1365	EST02396	2051	EST01138
281	EST00214	1383	EST02415	2056	EST01142
285	EST00286	1399	EST02433	2058	EST01144
333	EST00394	1401	EST02435	2059	EST01145
336	EST00397	1405	EST02439	2064	EST01149
339	EST00400	1417	EST02452	2090	EST01167
362	EST00418	1451	EST02487	2094	EST01171
389	EST00440	1457	EST02493	2116	EST01192
441	EST00481	1463	EST02500	2117	EST01193
454	EST00493	1473	EST02510	2128	EST01202
476	EST00509	1479	EST02516	2131	EST01205
493	EST00522	1516	EST02555	2134	EST01208
504	EST00529	1528	EST02569	2144	EST01216
516	EST00538	1531	EST02572	2145	EST01217
518	EST00540	1544	EST02586	2150	EST01222
551	EST01482	1551	EST02593	2155	EST01227
552	EST00565	1558	EST02601	2161	EST01231
559	EST00570	1561	EST02604	2163	EST01238
582	EST00592	1581	EST02625	2174	EST01242
602	EST00606	1586	EST02631	2176	EST01244
606	EST00609	1591	EST02636	2189	EST01255
608	EST00611	1616	EST02661	2214	EST01272
621	EST00620	1624	EST02670	2225	EST01278
635	EST00629	1630	EST02676	2227	EST01279
642	EST00634	1637	EST00796	2233	EST01284
644	EST00636	1639	EST00799	2235	EST01286
687	EST00671	1649	EST00808	2236	EST01287
700	EST00683	1651	EST00810	2255	EST01302
743	EST00714	1677	EST00835	2259	EST01304
753	EST00721	1682	EST00839	2263	EST01307
760	EST00726	1694	EST00849		
764	EST00729	1706	EST00857	SEQ ID#	EST#
808	EST00761	1708	EST00858	2267	EST01756
823	EST01864	1710	EST00860	2281	EST01321
834	EST00771	1716	EST00865	2283	EST01322
886	EST01886			2300	EST01333
919	EST01921	SEQ ID#	EST#	2303	EST01335
930	EST01933	1718	EST00867	2303	EST01335
		1731	EST00879	2314	EST01345
		1742	EST00887	2334	EST01358
		1746	EST00891	2339	EST01362
		1760	EST00903	2342	EST01365
		1767	EST00907	2348	EST01371
		1769	EST00909	2358	EST01379
		1777	EST00913	2367	EST01388
936	EST01939				
948	EST01957				
965	EST01978				



Table 7: ESTs with Good Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>				
20	EST00024	1041	EST02057	2362	EST01383
72	EST00071	1083	EST02102	2378	EST01397
82	EST00078	1099	EST02118	2399	EST01423
88	EST00084	1105	EST02124	2407	EST02714
137	EST00272	1113	EST02133		
177	EST00328	1139	EST02161		
193	EST00156	1146	EST02168		
200	EST00162	1196	EST02221		
218	EST00175	1210	EST02238		
228	EST00179	1233	EST02262		
247	EST00279	1285	EST02314		
264	EST00204	1331	EST02361		
267	EST00297	1388	EST02421		
296	EST00228	1418	EST02453		
371	EST00426	1439	EST02475		
385	EST00436	1502	EST02540		
392	EST00442	1537	EST02578		
414	EST00460	1563	EST02606		
433	EST00474	1599	EST02644		
453	EST00492	1602	EST02647		
471	EST00505	1693	EST00848		
496	EST00525	1695	EST00850		
524	EST00544	1729	EST00877		
526	EST00546	1730	EST00878		
529	EST00549	1738	EST00883		
549	EST00563	1739	EST00885		
557	EST00569	1743	EST00888		
578	EST00588	1768	EST00908		
596	EST00602	1780	EST00916		
607	EST00610	1804	EST00938		
619	EST00619	1805	EST00939		
657	EST00646	1811	EST00945		
660	EST00649	1819	EST00950		
689	EST00673	1826	EST00956		
695	EST00679	1830	EST00959		
699	EST00682	1845	EST00971		
729	EST00703	1848	EST00974		
742	EST00713	1853	EST00977		
747	EST00717	1967	EST01066		
755	EST00723	1992	EST01089		
759	EST00725	1994	EST01091		
776	EST00738	<u>SEQ ID#</u>	<u>EST#</u>		
778	EST00740	1997	EST01094		
782	EST01551	2046	EST01134		
829	EST00768	2101	EST01177		
835	EST00772	2102	EST01178		
836	EST00773	2105	EST01181		
862	EST01872	2106	EST01182		
881	EST01881	2141	EST01213		
<u>SEQ ID#</u>	<u>EST#</u>	2184	EST01251		
884	EST01884	2196	EST01260		
924	EST01926	2203	EST01264		
929	EST01932	2232	EST01283		
938	EST01941	2308	EST01339		
971	EST01985	2345	EST01368		
995	EST02009	2346	EST01369		
996	EST02010	2351	EST01373		
1031	EST02046	2354	EST01375		
		2355	EST01376		
		2359	EST01380		

Table 8: ESTs with Marginal Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>		
11	EST00018	1222	EST02251
12	EST00274	1224	EST02253
24	EST00027	1228	EST02257
45	EST00364	1267	EST02296
79	EST00076	1301	EST02331
90	EST00302	1397	EST02431
110	EST00096	1448	EST02484
144	EST00120	1480	EST02517
145	EST00121	1493	EST02531
192	EST00155	1499	EST02537
222	EST00177	1503	EST02541
234	EST00184	1527	EST02568
277	EST00212	1536	EST02577
319	EST00381	1548	EST02590
368	EST00423	1562	EST02605
370	EST00425	1572	EST02615
387	EST00438	1575	EST02618
402	EST00451	1595	EST02640
415	EST00461	1608	EST02653
418	EST00464	1610	EST02655
426	EST00470	1621	EST02667
503	EST00528	1627	EST02674
517	EST00539	1629	EST02677
522	EST00543	1631	EST02678
532	EST00551	1683	EST00840
540	EST00557	1692	EST00847
570	EST00580	1751	EST00895
573	EST00583	1756	EST00900
576	EST00586	1764	EST02690
613	EST00615	1770	EST00910
617	EST00617	1793	EST00929
626	EST00622	1847	EST00973
681	EST00665	1877	EST00998
726	EST00700	1897	EST01012
727	EST00701	1900	EST01015
738	EST00711	1939	EST01655
745	EST00715	1940	EST01046
752	EST00720	1954	EST01058
791	EST00746	<u>SEQ ID#</u>	<u>EST#</u>
795	EST00749	1990	EST01087
803	EST00756	2008	EST01103
845	EST00777	2031	EST01123
852	EST00782	2041	EST01130
854	EST00784	2044	EST01132
907	EST01907	2060	EST01146
912	EST01912	2100	EST01176
935	EST01938	2136	EST01210
<u>SEQ ID#</u>	<u>EST#</u>	2153	EST01225
968	EST01981	2204	EST01265
985	EST01999	2212	EST01270
988	EST02002	2248	EST01297
1043	EST02059	2250	EST01299
1081	EST02100	2266	EST01310
1089	EST02108	2309	EST01340
1116	EST02136	2347	EST01370
1134	EST02154	2388	EST01406
1205	EST02233	2398	EST01422
		2405	EST01427

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498	EST01467	600	EST01492	697	EST00680	799	EST00752	894	EST01894
499	EST01468	601	EST01493	698	EST00681	800	EST00753	895	EST01895
500	EST00527	603	EST01494	701	EST01522	801	EST00754	896	EST01896
501	EST02715	604	EST00607	702	EST00684	804	EST00757	897	EST01897
502	EST01469	605	EST00608	703	EST00685	805	EST00758	898	EST01898
507	EST00530	609	EST01496	704	EST00686	806	EST00759	899	EST01899
508	EST00531	610	EST00612	705	EST00687	807	EST00760	900	EST01900
509	EST01472	611	EST00613	706	EST00688	809	EST00762	901	EST01901
510	EST00532	612	EST00614	708	EST00689	810	EST00763	902	EST01902
511	EST00533	615	EST00616	709	EST00690	811	EST00764	903	EST01903
512	EST00534	616	EST01497	710	EST00691	813	EST00765	904	EST01904
513	EST00535	618	EST01498	711	EST00692	814	EST00766	905	EST01905
514	EST00536	620	EST01499	712	EST00693	815	EST01855	906	EST01906
515	EST00537	622	EST01843	713	EST00694	816	EST01856	908	EST01908
519	EST00541	623	EST00621	714	EST00695	817	EST01857	909	EST01909
520	EST00542	624	EST01500	715	EST01523	818	EST01858	910	EST01910
521	EST01474	625	EST01844	716	EST01524	819	EST01859	911	EST01911
523	EST01838	627	EST00623	717	EST01525	820	EST01860	914	EST01914
525	EST00545	628	EST01503	718	EST00696	822	EST01863	915	EST01915
527	EST00547	629	EST00624	719	EST01526	825	EST01866	916	EST01917
528	EST00548	630	EST01505	720	EST00697	826	EST01867	917	EST01919
530	EST01477	631	EST00625	721	EST01527	827	EST01558	918	EST01920
531	EST00550	632	EST00626	722	EST01528	828	EST00767	920	EST01922
533	EST00552	633	EST00627	723	EST00698	830	EST01559	921	EST01923
534	EST01478	634	EST00628	725	EST00699	831	EST00769	922	EST01924
535	EST00553	636	EST01507	728	EST00702	832	EST00770	923	EST01925
536	EST01479	637	EST00630	730	EST00704	837	EST01561	925	EST01927
537	EST00554	638	EST00631	731	EST00705	838	EST00774	926	EST01929
538	EST00555	640	EST01509	732	EST00706	839	EST01562	927	EST01930
539	EST00556	641	EST00633	733	EST00707	840	EST00775	928	EST01931
541	EST00558	643	EST00635	734	EST00708	841	EST00776	931	EST01934
542	EST01480	645	EST00637	735	EST00709	842	EST01563	932	EST01935
543	EST00559	646	EST00638	736	EST01532	843	EST01564	933	EST01936
544	EST00560	647	EST00639	737	EST00710	844	EST01565	934	EST01937
545	EST01481	648	EST00640	739	EST01534	846	EST00778	937	EST01940
547	EST00561	649	EST00641	740	EST01535	847	EST00779	939	EST01943
548	EST00562	651	EST00643	741	EST00712	848	EST01566		
550	EST00564	652	EST01510	744	EST01537	849	EST01567		
553	EST00566	654	EST00644	746	EST00716	850	EST00780	940	EST01944
555	EST01483	655	EST00645	748	EST01850	851	EST00781	941	EST01945
556	EST00568	656	EST01513	749	EST00719			942	EST01947
558	EST01484	658	EST00647	750	EST01539			943	EST01948
560	EST01485	659	EST00648	751	EST01540	853	EST00783	944	EST01949
561	EST00571	661	EST00650	754	EST00722	855	EST00785	945	EST01950
562	EST00572	662	EST00651			856	EST01568	946	EST01953
563	EST00573	663	EST00652			857	EST01868	947	EST01954
564	EST00574	664	EST00653	756	EST01541	858	EST01869	949	EST01958
565	EST00575	665	EST00654	758	EST00724	859	EST01870	950	EST01959
566	EST00576			761	EST01544	860	EST00786	953	EST01962
567	EST00577			762	EST00727	861	EST01871	954	EST01963
568	EST00578	666	EST01514	763	EST00728	863	EST01873	956	EST01968
569	EST00579	667	EST00655	765	EST00730	864	EST00787	957	EST01969
		668	EST00656	766	EST00731	865	EST01569	958	EST01970
		669	EST00657	767	EST00732	866	EST01874	959	EST01972
		670	EST00658	768	EST00733	867	EST01875	960	EST01973
571	EST00581	671	EST00659	770	EST00735	868	EST01876	961	EST01974
572	EST00582	672	EST00660	771	EST01546	869	EST00788	962	EST01975
574	EST00584	673	EST01515	772	EST00736	870	EST00789	963	EST01976
575	EST00585	674	EST01516	774	EST01548	871	EST00790	964	EST01977
577	EST00587	675	EST00661	775	EST00737	872	EST00791	966	EST01979
580	EST00590	676	EST00662	777	EST00739	873	EST00792	967	EST01980
581	EST00591	677	EST00663	779	EST00741	874	EST00793	970	EST01983
583	EST00593	678	EST01517	780	EST01549	875	EST00794	972	EST01986
584	EST00594	679	EST01518	781	EST01550	876	EST00795	974	EST01988
585	EST00595	680	EST00664	783	EST01552	877	EST01877	975	EST01989
586	EST00596	682	EST00666	785	EST01553	878	EST01878	976	EST01990
587	EST01488	683	EST00667	786	EST00742	879	EST01879	977	EST01991
588	EST00597	684	EST00668	787	EST00743	880	EST01880	978	EST01992
589	EST00598	685	EST00669	788	EST00744	882	EST01882	981	EST01995
590	EST00599	686	EST00670	789	EST00745	883	EST01883	982	EST01996
591	EST01489	688	EST00672	790	EST01554	885	EST01885	983	EST01997
592	EST00600	690	EST00674	792	EST00747	887	EST01887	984	EST01998
593	EST00601	692	EST00676	793	EST00748	889	EST01889	987	EST02001
595	EST01840	693	EST00677	794	EST01555	890	EST01890	989	EST02003
597	EST00603	694	EST00678	796	EST00750	892	EST01892	990	EST02004
598	EST00604	696	EST01521	797	EST00751	893	EST01893	991	EST02005
599	EST00605								

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992	EST02006	1086	EST02105	1184	EST02209	1274	EST02303	1363	EST02394
994	EST02008	1087	EST02106	1185	EST02210	1275	EST02304	1364	EST02395
997	EST02011	1088	EST02107	1186	EST02211	1276	EST02305	1366	EST02397
999	EST02013	1091	EST02110	1187	EST02212	1278	EST02307	1367	EST02398
1001	EST02015	1093	EST02112	1188	EST02213	1279	EST02308	1368	EST02399
1002	EST02016	1095	EST02114	1189	EST02214	1280	EST02309	1370	EST02401
1003	EST02017	1097	EST02116	1190	EST02215	1281	EST02310	1372	EST02403
1005	EST02019	1098	EST02117	1191	EST02216	1282	EST02311	1373	EST02404
1006	EST02020	1100	EST02119	1192	EST02217	1283	EST02312	1375	EST02406
1008	EST02022	1101	EST02120	1193	EST02218	1284	EST02313	1376	EST02407
1009	EST02023	1102	EST02121	1194	EST02219	1286	EST02316	1377	EST02408
1010	EST02024	1104	EST02123	1195	EST02220	1288	EST02318	1378	EST02409
1011	EST02025	1106	EST02125	1197	EST02222	1289	EST02319	1379	EST02410
1012	EST02026	1107	EST02126	1198	EST02223	1290	EST02320	1380	EST02411
1013	EST02027	1108	EST02127	1199	EST02224	1291	EST02321	1381	EST02413
1014	EST02028	1109	EST02128	1200	EST02226	1292	EST02322	1382	EST02414
1015	EST02029	1110	EST02129	1201	EST02228	1293	EST02323		
1016	EST02030	1111	EST02131	1202	EST02229	1294	EST02324		
1017	EST02031	1112	EST02132	1203	EST02230	1295	EST02325		
1019	EST02033	1114	EST02134	1204	EST02232	1296	EST02326		
1022	EST02036	1117	EST02137	1206	EST02234				
1023	EST02037	1119	EST02139	1207	EST02235				
1024	EST02038	1120	EST02140	1208	EST02236	1298	EST02328		
1025	EST02040	1121	EST02141	1209	EST02237	1299	EST02329		
1026	EST02041	1122	EST02142			1300	EST02330		
1027	EST02042	1123	EST02143			1302	EST02332		
1028	EST02043	1124	EST02144	1211	EST02239	1303	EST02333		
1029	EST02044	1125	EST02145	1212	EST02240	1304	EST02334		
1030	EST02045			1213	EST02241	1305	EST02335		
1032	EST02048			1214	EST02242	1306	EST02336		
1033	EST02049			1215	EST02244	1307	EST02337		
1036	EST02052			1216	EST02245	1309	EST02339		
				1217	EST02246	1310	EST02340		
				1218	EST02247	1311	EST02341		
				1219	EST02248	1313	EST02343		
				1220	EST02249	1314	EST02344		
				1221	EST02250	1315	EST02345		
				1223	EST02252	1316	EST02346		
				1225	EST02254	1317	EST02347		
				1226	EST02255	1318	EST02348		
				1227	EST02256	1319	EST02349		
				1232	EST02261	1320	EST02350		
				1234	EST02263	1321	EST02351		
				1235	EST02264	1322	EST02352		
				1236	EST02265	1323	EST02353		
				1237	EST02266	1325	EST02355		
				1238	EST02267	1326	EST02356		
				1239	EST02268	1327	EST02357		
				1240	EST02269	1328	EST02358		
				1241	EST02270	1329	EST02359		
				1242	EST02271	1330	EST02360		
				1244	EST02273	1333	EST02363		
				1246	EST02275	1334	EST02364		
				1247	EST02276	1335	EST02365		
				1248	EST02277	1336	EST02366		
				1249	EST02278	1337	EST02367		
				1250	EST02279	1338	EST02368		
				1251	EST02280	1339	EST02369		
				1252	EST02281	1342	EST02372		
				1253	EST02282	1343	EST02373		
				1254	EST02283	1345	EST02375		
				1255	EST02284	1346	EST02376		
				1256	EST02285	1347	EST02377		
				1257	EST02286	1349	EST02379		
				1258	EST02287	1350	EST02380		
				1259	EST02288	1351	EST02381		
				1260	EST02289	1352	EST02382		
				1261	EST02290	1353	EST02383		
				1262	EST02291	1354	EST02384		
				1263	EST02292	1355	EST02385		
				1268	EST02297	1357	EST02387		
				1269	EST02298	1358	EST02388		
				1270	EST02299	1359	EST02390		
				1271	EST02300	1360	EST02391		
				1272	EST02301	1361	EST02392		
				1273	EST02302	1362	EST02393		



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1907	EST01022	2016	EST01110	2118	EST01194	2223	EST01742	2332	EST01794
1908	EST01023	2018	EST01111	2119	EST01195	2224	EST01277	2333	EST01357
1909	EST01024	2019	EST01112	2122	EST01197	2228	EST01280	2335	EST01359
1911	EST02694	2020	EST01113	2123	EST01713	2229	EST01281	2336	EST01360
1912	EST01025	2021	EST01114	2124	EST01198	2231	EST01746	2337	EST01361
1913	EST01646	2022	EST01115	2125	EST01199	2237	EST01288	2340	EST01802
1915	EST01027	2023	EST01116	2126	EST01200	2238	EST01289	2341	EST01364
1916	EST01028	2025	EST01118	2127	EST01201	2239	EST01290	2343	EST01366
1917	EST01029	2026	EST01119	2129	EST01203	2240	EST01291	2344	EST01367
1918	EST02695	2027	EST01120	2130	EST01204	2241	EST01747	2349	EST01372
1919	EST01030	2028	EST01121	2132	EST01206	2242	EST01292	2350	EST02708
1920	EST01031	2029	EST01682	2133	EST01207	2243	EST01293	2352	EST01374
1921	EST01647	2030	EST01122	2135	EST01209	2244	EST01294	2356	EST01377
1922	EST01032	2033	EST01684	2137	EST01211	2246	EST01295	2357	EST01378
1923	EST01033	2034	EST01124	2139	EST01716	2247	EST01296	2360	EST01381
1924	EST01034	2035	EST01125	2140	EST01212	2249	EST01298	2361	EST01382
1925	EST01035	2036	EST01126	2142	EST01214	2251	EST01300	2363	EST01384
1926	EST01036	2037	EST01686	2143	EST01215	2252	EST01750	2364	EST01385
1927	EST01037	2038	EST01127	2147	EST01219	2253	EST01301	2365	EST01386
1929	EST01039	2039	EST01128	2148	EST01220	2256	EST02718	2366	EST01387
1932	EST01042	2040	EST01129	2151	EST01223	2257	EST01303	2369	EST01811
1934	EST01043	2042	EST01688	2152	EST01224	2258	EST01754	2370	EST01390
1935	EST01044	2045	EST01133	2154	EST01226	2260	EST01305	2371	EST01391
1936	EST01045	2047	EST01135	2156	EST01718	2261	EST01755	2372	EST01392
1937	EST01652	2048	EST01136	2157	EST01719	2262	EST01306	2375	EST01815
1938	EST01654	2049	EST01689	2158	EST01228	2264	EST01308	2376	EST01395
1941	EST01047	2050	EST01137	2159	EST01229	2265	EST01309	2377	EST01396
1942	EST01048	2052	EST01139	2160	EST01230	2268	EST01311	2379	EST01398
1943	EST01049	2053	EST01140	2162	EST01232	2269	EST01312	2380	EST01399
1945	EST01051	2054	EST01141	2163	EST01233	2270	EST01313	2381	EST01400
1946	EST02696	2055	EST01690	2164	EST01234	2271	EST01314	2382	EST01401
1947	EST01052	2057	EST01143	2165	EST01720	2272	EST01762	2383	EST01402
1948	EST01053	2061	EST01147	2166	EST01236	2273	EST01315	2384	EST01403
1950	EST01055	2062	EST02701	2167	EST01237	2275	EST01316	2385	EST01816
1951	EST01056	2063	EST01148	2169	EST01722	2276	EST01317	2386	EST01404
1952	EST01057	2065	EST01691	2170	EST01239	2277	EST01318	2387	EST01405
1955	EST01662	2066	EST01692	2171	EST01240	2278	EST01319		
1957	EST01059	2067	EST01693	2172	EST01241	2279	EST01320		
1958	EST01060	2069	EST01150	2175	EST01243	2280	EST01763		
1959	EST01061	2070	EST01151	2177	EST01245	2284	EST01323		
1963	EST01063	2072	EST01152	2178	EST01726	SEQ ID#	EST#		
1964	EST01064	2074	EST01698	2179	EST01246				
1966	EST01065	2075	EST01153	2180	EST01247	2285	EST01768		
1968	EST01067	2076	EST02702	2181	EST01248	2287	EST01770		
1969	EST01068	2077	EST01154	SEQ ID#	EST#	2288	EST01324		
1970	EST01666	2078	EST01155			2290	EST01772		
1971	EST01069	2079	EST01156	2182	EST01249	2291	EST01773		
1972	EST01070	2080	EST01157	2183	EST01250	2292	EST01326		
1975	EST01073	SEQ ID#	EST#	2185	EST01252	2293	EST01327		
1976	EST01074			2186	EST01253	2294	EST01328		
1978	EST01076	2081	EST01158	2187	EST01727	2295	EST01329		
1979	EST01077	2082	EST01159	2188	EST01254	2296	EST01330		
SEQ ID#	EST#	2083	EST01160	2190	EST01728	2298	EST01331		
		2084	EST01161	2191	EST01256	2299	EST01332		
1980	EST01078	2085	EST01162	2193	EST01258	2301	EST01334		
1981	EST01079	2086	EST01163	2194	EST01729	2304	EST01780		
1983	EST01081	2087	EST01164	2195	EST01259	2305	EST01336		
1984	EST01082	2088	EST01166	2197	EST01261	2306	EST01337		
1985	EST01083	2091	EST01168	2198	EST01730	2310	EST01341		
1986	EST01084	2093	EST01170	2199	EST01262	2311	EST01342		
1988	EST01085	2095	EST01701	2200	EST01731	2312	EST01343		
1989	EST01086	2096	EST01172	2201	EST01263	2313	EST01344		
1995	EST01092	2097	EST01173	2202	EST01732	2315	EST01346		
1996	EST01093	2098	EST01174	2205	EST01735	2316	EST01782		
1998	EST01095	2099	EST01175	2206	EST01736	2317	EST01347		
1999	EST01096	2103	EST01179	2208	EST01267	2318	EST01348		
2002	EST01099	2104	EST01180	2209	EST02717	2319	EST01349		
2003	EST01675	2107	EST01183	2210	EST01268	2321	EST01350		
2005	EST01100	2108	EST01184	2211	EST01269	2322	EST01351		
2006	EST01101	2109	EST01185	2213	EST01271	2323	EST01789		
2007	EST01102	2110	EST01186	2215	EST01273	2325	EST01353		
2009	EST01677	2111	EST01187	2218	EST01274	2327	EST01354		
2010	EST01104	2112	EST01188	2219	EST01275	2328	EST01355		
2011	EST01105	2113	EST01189	2220	EST01740	2329	EST01792		
2014	EST01108	2114	EST01190	2221	EST01741	2330	EST01793		
2015	EST01109	2115	EST01191	2222	EST01276	2331	EST01356		

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<u>SEQ ID#</u>	<u>EST#</u>
2389	EST01407
2391	EST01415
2392	EST01416
2395	EST01419
2397	EST01421
2401	EST01424
2403	EST01425
2404	EST01426
2406	EST02713
2409	EST00273

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## EXAMPLE 10

Functional Groupings of ESTs and Corresponding Genes

By matching new human ESTs to known sequences from other species, the apparent function of the gene corresponding to the EST can be ascertained. The data generated in Example 3 and 4 have been used to categorize 127 of the ESTs of the present invention, and their corresponding genes, into predicted functional groups. (These 127 are ESTs with database matches to sequences from other species for which a function was known.) Two different grouping schemes have been used.

The first scheme separates the sequences into three broad categories: metabolic; regulatory; and structural. These groupings are set out in Table 10.

The second grouping scheme separates the sequences into 13 specific categories: cell surface proteins; developmental control; energy metabolism; kinases and phosphatases; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. These groupings are set out in Table 11.

Table 10: Three-Class Functional Groupings of ESTs

SEQ ID	EST#	Group	Putative Identification
1834	EST01620	M	AMP deaminase, brain
97	EST00289	M	Aconitase
691	EST00675	M	Alcohol dehydrogenase
2092	EST01700	M	Anion exchanger homolog AE3
396	EST01443	M	CDPdiacylglycerol-serine O-phosphatidyltransferase
1956	EST01663	M	Ca <sup>2+</sup> -transporting ATPase 2
1039	EST02055	M	Calcium channel
2192	EST01257	M	Diacylglycerol kinase, lymphocyte
1441	EST02477	M	Diamine acetyltransferase
2289	EST01325	M	Fatty acid synthase
310	EST00377	M	Fo ATPase beta subunit, mitochondrial
1667	EST00825	M	Gamma-aminobutyric acid transporter
1412	EST02446	M	Glutamate-aspartate carrier protein
1020	EST02034	M	Glutaminase
2326	EST01791	M	Inositol-1,4,5-trisphosphate 3-kinase
2173	EST01724	M	Lon protease
1427	EST02463	M	Long-chain-fatty-acid-CoA ligase
2226	EST01744	M	NAD(P) <sup>+</sup> transhydrogenase (B-specific)
1566	EST02609	M	Neutrophil oxidase factor
1681	EST01573	M	Nucleoside diphosphate kinase
2254	EST01751	M	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
93	EST00287	M	Processing enhancing protein
2297	EST01775	M	Prohormone cleavage enzyme
9	EST00376	M	Prolyl endopeptidase
1654	EST01572	M	Protochlorophyllide reductase
38	EST00374	M	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	M	Ribosomal protein L18a
1856	EST01627	M	Ribosomal protein L1a
1974	EST01667	M	Ribosomal protein L3
301	EST00300	M	Ribosomal protein L30
22	EST00301	M	Ribosomal protein S10
2402	EST01826	M	Ribosomal protein S10
463	EST01459	M	Ribosomal protein YL10
2073	EST01697	M	Succinate dehydrogenase flavoprotein
2138	EST01715	M	Succinate dehydrogenase flavoprotein
1771	EST01601	M	Thiosulfate sulfurtransferase (rhodanese)
2121	EST01711	M	Valine-tRNA ligase
1726	EST01588	M	XPR2 alkaline extracellular protease
913	EST01913	M	Clathrin coat assembly protein AP50 homolog
1035	EST02051	M	J1 protein
969	EST01982	R	ADP-ribosylation factor 1
1126	EST02146	R	Calbindin D28
1910	EST01645	R	Calmodulin
485	EST01466	R	Calmodulin-dependent protein kinase, type II, beta
2302	EST01779	R	Discs-large tumor suppressor
188	EST00256	R	Enhancer of split
1229	EST02258	R	KUP protein
993	EST02007	R	Kinase 5 protein
2282	EST01764	R	Lamin B receptor
SEQ ID	EST#	Group	Putative Identification
161	EST00247	R	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	R	MARCKS homolog
1386	EST02418	R	MARCKS homolog
227	EST00259	R	Notch/Xotch
952	EST01961	R	Notch/Xotch
1395	EST02429	R	Nuclear factor 1-like protein (NF1)
2353	EST01806	R	Prohibitin
1069	EST02087	R	Protein kinase C, zeta
1933	EST01650	R	Protein phosphatase 2A beta subunit

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202	EST00298	R	Protein-tyrosine phosphatase LRP
1478	EST02515	R	Rab5
1408	EST02442	R	Seven in absentia
300	EST00232	R	Transforming protein (dbl)
1147	EST02169	R	Tyrosine kinase
1348	EST02378	R	cAMP-dependent protein kinase inhibitor
1931	EST01041	R	cAMP-regulated phosphoprotein
1413	EST02447	R	cAMP-specific phosphodiesterase
37	EST00038	R	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	R	rho H12/ ARH12
299	EST00249	R	smg p25A GDP dissociation inhibitor
189	EST00282	R	trkB
1332	EST02362	R	GA binding protein, beta subunit
1277	EST02306	R	Bib protein
43	EST00371	R	Maternal G10 protein
1704	EST01580	R	Myeloid differentiation primary response gene My
346	EST01828	R	Otd homeotic protein
187	EST00152	R	Wilm's tumor-related protein
249	EST00275	R	Zinc Finger Proteins
413	EST01446	R	Zinc Finger Proteins
469	EST01460	R	Zinc Finger Proteins
833	EST01560	R	Zinc Finger Proteins
1230	EST02259	R	Zinc finger proteins
1496	EST02534	R	Zinc finger proteins
2324	EST01352	R	Zinc Finger Proteins
208	EST00250	S	60K filarial antigen
2320	EST01784	S	60K filarial antigen
251	EST00370	S	Actin, other
2146	EST01218	S	Actin, other
248	EST00271	S	Actinin, alpha
891	EST01891	S	Actinin, alpha
1500	EST02538	S	Actinin, alpha
132	EST00110	S	Agrin
1852	EST01625	S	Agrin
1965	EST01664	S	Amyloid A4
2068	EST01694	S	Amyloid A4
2408	EST00244	S	Amyloid A4
1880	EST01634	S	Axonal glycoprotein TAG-1
2004	EST01676	S	Cofilin
650	EST00642	S	Dilute (myosin heavy chain)
2217	EST01738	S	Gelation factor ABP-280
1885	EST01639	S	Histocompatibility antigen modifier 1
77	EST00257	S	Kinesin
SEQ ID	EST#	Group	Putative Identification
78	EST00258	S	Kinesin
2245	EST01748	S	Kinesin
313	EST00276	S	Lysosomal membrane glycoprotein 1 (LAMP-1)
223	EST00368	S	Microtubule-associated protein 1B
824	EST01865	S	Microtubule-associated protein 1B
2032	EST01683	S	Microtubule-associated protein 1B
2017	EST01678	S	Milk fat globule membrane protein
1567	EST02610	S	Neural cell adhesion molecule L1
506	EST01471	S	Neuraxin
2368	EST01389	S	Radial spoke protein 3
951	EST01960	S	Spectrin, beta
2089	EST01699	S	Sperm membrane protein
653	EST01512	S	Tubulin, alpha
311	EST00270	S	Tubulin, beta
594	EST01490	S	Tubulin, beta
757	EST01542	S	Tubulin, beta
1245	EST02274	S	Tubulin, beta
1589	EST02634	S	Tubulin, beta
1468	EST02505	S	Matrin 3

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1371	EST02402	S	Talin
1701	EST00853	S	Unc-104

Group Key: M: Metabolic, R: Regulatory, S: Structural

Table 11: Thirteen-Class Functional Groupings of ESTs

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
208	EST00250	CS	60K filarial antigen
2320	EST01784	CS	60K filarial antigen
1965	EST01664	CS	Amyloid A4
2068	EST01694	CS	Amyloid A4
2408	EST00244	CS	Amyloid A4
1880	EST01634	CS	Axonal glycoprotein TAG-1
1885	EST01639	CS	Histocompatibility antigen modifier 1
313	EST00276	CS	Lysosomal membrane glycoprotein 1 (LAMP-1)
2017	EST01678	CS	Milk fat globule membrane protein
1567	EST02610	CS	Neural cell adhesion molecule L1
2368	EST01389	CS	Radial spoke protein 3
2089	EST01699	CS	Sperm membrane protein
1277	EST02306	DC	Bib protein
188	EST00256	DC	Enhancer of split
43	EST00371	DC	Maternal G10 protein
1704	EST01580	DC	Myeloid differentiation primary response gene MyD1
227	EST00259	DC	Notch/Xotch
952	EST01961	DC	Notch/Xotch
346	EST01828	DC	Orthodentical homeotic protein
1408	EST02442	DC	Seven in absentia
97	EST00289	EM	Aconitase
310	EST00377	EM	Fo ATPase beta subunit, mitochondrial
485	EST01466	KP	Calmodulin-dependent protein kinase, type II, beta
993	EST02007	KP	Kinase 5 protein
1069	EST02087	KP	Protein kinase C, zeta
1933	EST01650	KP	Protein phosphatase 2A beta subunit
202	EST00298	KP	Protein-tyrosine phosphatase LRP
1348	EST02378	KP	cAMP-dependent protein kinase inhibitor
2302	EST01779	OG	Discs-large tumor suppressor
2353	EST01806	OG	Prohibitin
1478	EST02515	OG	Rab5
300	EST00232	OG	Transforming protein (db1)
37	EST00038	OG	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	OG	rho H12/ ARH12
1834	EST01620	OM	AMP deaminase, brain
691	EST00675	OM	Alcohol dehydrogenase
396	EST01443	OM	CDPdiacylglycerol-serine O-phosphatidyltransferase
2192	EST01257	OM	Diacylglycerol kinase, lymphocyte
1441	EST02477	OM	Diamine acetyltransferase
2289	EST01325	OM	Fatty acid synthase
1020	EST02034	OM	Glutaminase
2326	EST01791	OM	Inositol-1,4,5-trisphosphate 3-kinase
1427	EST02463	OM	Long-chain-fatty-acid-CoA ligase
2226	EST01744	OM	NAD(P)+ transhydrogenase (B-specific)
1566	EST02609	OM	Neutrophil oxidase factor
1681	EST01573	OM	Nucleoside diphosphate kinase

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2254	EST01751	OM	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
1654	EST01572	OM	Protochlorophyllide reductase
2073	EST01697	OM	Succinate dehydrogenase flavoprotein
2138	EST01715	OM	Succinate dehydrogenase flavoprotein
1771	EST01601	OM	Thiosulfate sulfurtransferase (rhodanese)
2173	EST01724	PI	Lon protease
2297	EST01775	PI	Prohormone cleavage enzyme
9	EST00376	PI	Prolyl endopeptidase
1726	EST01588	PI	XPR2 alkaline extracellular protease
1147	EST02169	PP	Tyrosine kinase
2282	EST01764	RT	Lamin B receptor
189	EST00282	RT	trkB
251	EST00370	SC	Actin, other
2146	EST01218	SC	Actin, other
248	EST00271	SC	Actinin, alpha
891	EST01891	SC	Actinin, alpha
1500	EST02538	SC	Actinin, alpha
132	EST00110	SC	Agrin
1852	EST01625	SC	Agrin
2004	EST01676	SC	Cofilin
650	EST00642	SC	Dilute (myosin heavy chain)
2217	EST01738	SC	Gelation factor ABP-280
77	EST00257	SC	Kinesin
78	EST00258	SC	Kinesin
2245	EST01748	SC	Kinesin
1468	EST02505	SC	Matrin 3
223	EST00368	SC	Microtubule-associated protein 1B
824	EST01865	SC	Microtubule-associated protein 1B
2032	EST01683	SC	Microtubule-associated protein 1B
506	EST01471	SC	Neuraxin
951	EST01960	SC	Spectrin, beta
1371	EST02402	SC	Talin
653	EST01512	SC	Tubulin, alpha
311	EST00270	SC	Tubulin, beta
594	EST01490	SC	Tubulin, beta
757	EST01542	SC	Tubulin, beta
1245	EST02274	SC	Tubulin, beta
1589	EST02634	SC	Tubulin, beta
1701	EST00853	SC	Unc-104
969	EST01982	ST	ADP-ribosylation factor 1
1126	EST02146	ST	Calbindin D28
1910	EST01645	ST	Calmodulin
161	EST00247	ST	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	ST	MARCKS homolog
1386	EST02418	ST	MARCKS homolog
1931	EST01041	ST	cAMP-regulated phosphoprotein
1413	EST02447	ST	cAMP-specific phosphodiesterase
299	EST00249	ST	smg p25A GDP dissociation inhibitor

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2092	EST01700	TP	Anion exchanger homolog AE3
1956	EST01663	TP	Ca <sup>2+</sup> -transporting ATPase 2
1039	EST02055	TP	Calcium channel
1667	EST00825	TP	Gamma-aminobutyric acid transporter
1412	EST02446	TP	Glutamate-aspartate carrier protein
913	EST01913	TT	Clathrin coat assembly protein AP50 homolog
1035	EST02051	TT	J1 protein
93	EST00287	TT	Processing enhancing protein
38	EST00374	TT	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	TT	Ribosomal protein L18a
1856	EST01627	TT	Ribosomal protein L1a
1974	EST01667	TT	Ribosomal protein L3
301	EST00300	TT	Ribosomal protein L30
22	EST00301	TT	Ribosomal protein S10
2402	EST01826	TT	Ribosomal protein S10
463	EST01459	TT	Ribosomal protein YL10
2121	EST01711	TT	Valine-tRNA ligase
1332	EST02362	TX	GA binding protein, beta subunit
1229	EST02258	TX	KUP protein
1395	EST02429	TX	Nuclear factor 1-like protein (NF1)
187	EST00152	TX	Wilm's tumor-related protein
249	EST00275	TX	Zinc Finger Proteins
413	EST01446	TX	Zinc Finger Proteins
469	EST01460	TX	Zinc Finger Proteins
833	EST01560	TX	Zinc Finger Proteins
1230	EST02259	TX	Zinc finger proteins
1496	EST02534	TX	Zinc finger proteins
2324	EST01352	TX	Zinc Finger Proteins

Group Key: CS: Cell Surface, DC: Developmental Control, EM: Energy Metabolism, KP: Kinases and Phosphatases, OG: Oncogenes, OM: Other Metabolism, PI, Peptidases and Peptidase Inhibitors, RT: Receptors, SC: Structural and Cytoskeletal, ST: Signal Transduction, TP: Transporters, TT: Transcription, Translation, and Subcellular Localization, TX: Transcription Factors.

## EXAMPLE 11

cDNA Libraries Generated From Specific Genomic DNA  
by Exon Expression & Amplification

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Exon amplification was used to express potential exons from genomic DNA in a recombinant vector that contains some of the signals necessary for splicing. If an exon is present in the proper orientation in the vector, that exon will be spliced in a mammalian cell and will become part of the mRNA of that cell. The exon splice-product can be purified from other mRNA in the cell by conversion of the mRNA to cDNA and selective amplification of the recombinant splice-product cDNAs. Cosmid DNA from human chromosome 19q13.3 was digested with BamHI or BamHI/BglIII restriction enzymes. The fragments generated were collected and size specifically cloned into an expression vector (Buckler, et al. Proc. Nat'l. Acad. Sci. USA, 88:4005-4009 (1991)). After transfection by electroporation of these constructs into COS cells, RNA transcripts were generated using the SV40 early promoter and a polyadenylation signal derived from SV40 both present in the expression vector. When a fragment of genomic DNA contains an entire exon with flanking intron sequence in the sense orientation, the exon should be retained in the mature poly(A)+ cytoplasmic RNA. Therefore, the mRNA was used as template for cDNA synthesis using reverse transcriptase and vector-priming. Subsequently, the cDNAs were amplified by vector-priming using PCR. A fraction of this first PCR product was reamplified using internal vector-primers containing terminal cloning sites. These products were end-repaired with T4 DNA polymerase, digested with the appropriate restriction enzymes, gel purified and cloned into pBluescript vectors. The constructs were transfected into XL1-Blue competent cells and plated on LB/X-gal/IPTG/ampicillin plates. White colonies were selected and expanded to prepare DNA templates as described in Example 2.



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When multiple cosmids or YAC clones were used as the source DNA, a pool of specific expressed exons was obtained as a cDNA library. The EST/cDNAs sequenced from this specific library are disclosed herein as SEQ ID NOS: 2412-2417.

## EXAMPLE 12

### PCR Amplification from Predicted Exons

Computational analyses can be applied to genomic DNA sequences to predict protein coding regions. The coding region prediction program CRM (E. Uberbacher and R. Mural, Proc. Natl. Acad. Sci. USA 88:11261-5 (1991)) finds open reading frames and classifies them according to their probability of being coding regions. These regions are subsequently examined using the GM program (C. Fields and C. Soderlund, Comp. Applic. Biosci. 6: 263, 1990), which predicts intron-exon structure. PCR primers are then designed to amplify the predicted exons and used to test human cDNA libraries (for example, fetal brain or placental libraries) for the presence of these putative exons using a PCR assay.

This strategy has been successfully applied in two large scale genomic sequencing projects, the Huntington's locus of human chromosome 4p16.3 (McCombie, et al., submitted) and human chromosome locus 19q13.3 (Martin-Gallardo, et al., submitted). Sequences from eleven predicted exons from chromosome 4 were present in tested cDNA libraries, indicating that this region has at least two and probably three expressed genes. In one case, the method resulted in an amplification product which spanned two predicted exons. (SEQ ID NO: 2411.) When sequenced, this PCR product indicated the presence of the two exons from which the primers were initially chosen, as well as an intervening exon which was also predicted by the CRM program, but not the intervening genomic sequences. In a similar fashion, the presence of the two predicted genes in the chromosome 19

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sequence was confirmed by sequencing PCR products. SEQ ID NO 2410, includes a partial exon of one of these genes.

### EXAMPLE 13

#### 5           Complete Sequence of EST Clone Inserts

There are a number of methods known to those with skill in the art of molecular biology, to obtain sequence information from the cDNAs corresponding to the EST sequences. Procedures for these methods are provided in Basic Methods in Molecular Biology (David et al. *supra*). One way to acquire more information about the cDNA from which an EST was derived is to sequence the remainder of the cDNA clone. The complete sequence of the inserts of four EST clones (representing SEQ ID NOS 188, 189, 223, and 227) was determined using Exonuclease III deletions. Briefly, EST clones were digested with the restriction enzymes SalI and KpnI or PstI and BamHI (for deletions from the Forward primer and Reverse primer ends of the insert, respectively). The KpnI and PstI enzymes leave 3' sticky ends following digestion, which Exonuclease III is unable to bind. This results in unidirectional deletions into the cDNA insert leaving the vector sequence undisturbed. After addition of Exonuclease III to the Forward and Reverse deletion reactions, aliquots of the reaction were removed at defined time intervals and the reaction was stopped to prevent further deletion. S1 nuclease and Klenow DNA polymerase were added to create blunt ended fragments suitable for ligation.

Samples for each time point was purified by electrophoresis through an agarose gel and religated. Two to four representative clones from each time point in each direction were sequenced to give between 200 and 400 base pairs of sequence data. Careful selection of deletion conditions and time points allow a deletion series of approximately 100-200 base pairs difference in length at each consecutive time point. Sequence fragments were reassembled into a redundant contiguous sequence using the INHERIT

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software from Applied Biosystems, Inc. (Foster City, CA). In this way, the complete insert from these four cDNA clones was sequenced on both strands to an average redundancy between three and four (each base was sequenced between three and four times, on average). Those complete insert sequences are disclosed herein as SEQ ID 2418, 2419, 2420, and 2421, corresponding to original ESTs with SEQ ID 223, 189, 227, and 188, respectively.

#### EXAMPLE 14

##### Determining Reading Frame, Orientation, Coding Regions: ESTs and Complete cDNA Sequences

Once the complete cDNA sequence has been determined in accordance with Example 13, the reading frame, orientation, and coding regions are determined by computer techniques. (The complete coding region is considered to be the largest open reading frame from a methionine to a stop codon.)

Specifically, the CRM program on the GRAIL server is used as explained in Example 9 to determine probable coding regions. This information is supplemented by location of start and stop codons. Where possible, the results of the CRM analysis are validated by comparison of the cDNA sequence to known sequences using database matching, in accordance with Examples 3 and 4. If a match of 50% (or even less) is found in any particular reading frame and orientation, this serves to verify corresponding CRM results. Alternatively, database matches can be used to determine reading frame and orientation without use of the CRM program. Of course, if the cDNA is derived from a directional library, the probable orientation is already known.

#### EXAMPLE 15

##### Preparation of PCR Primers and Amplification of DNA

The EST sequences and the corresponding cDNA sequences and genomic sequences may be used, in accordance with the

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present invention, to prepare PCR primers for a variety of applications. The PCR primers are preferably at least 15 bases, and more preferably at least 18 bases in length. The procedure of Example 5 is repeated using the desired EST, or using the corresponding cDNA or genomic DNA sequence from Example 13. It is preferred that the primer pairs have approximately the same G/C ratio, so that melting temperatures are approximately the same. When screening cDNA, introns are of no concern; however, when screening genomic DNA, primers should be selected to avoid reading across introns, which usually are too large to amplify. The PCR primers and amplified DNA of this Example find use in the Examples that follow.

#### EXAMPLE 16

##### Forensic Matching by DNA Sequencing

In one exemplary method, DNA samples are isolated from forensic specimens of, for example, hair, semen, blood or skin cells by conventional methods. A panel of PCR primers derived from a number of the sequences of Example 1, 2, 11, 12 and/or 13 is then utilized in accordance with Example 12 to obtain DNA of approximately 100-200 bases in length from the forensic specimen. Corresponding sequences are obtained from a suspect. Each of these identification DNAs is then sequenced, and a simple database comparison determines the differences, if any, between the sequences from the suspect and those from the sample. Statistically significant differences between the suspect's DNA sequences and those from the sample conclusively prove a lack of identity. This lack of identity can be proven, for example, with only one sequence. Identity, on the other hand, should be demonstrated with a large number of sequences, all matching. Preferably, a minimum of 50 statistically identical sequences

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of 100 bases in length are used to prove identity between the suspect and the sample.

**EXAMPLE 17****Positive Identification by DNA Sequencing**

The technique outlined in the previous example may also be used on a larger scale to provide a unique fingerprint-type identification of any individual. In this technique, primers are prepared from a large number of sequences from Examples 1, 2, 11, 12 and/or 13. Preferably, 20 to 50 different primers are used. These primers are used to obtain a corresponding number of PCR-generated DNA segments from the individual in question in accordance with Example 15. Each of these DNA segments is sequenced, using the methods set forth in Example 1. The database of sequences generated through this procedure uniquely identifies the individual from whom the sequences were obtained. The same panel of primers may then be used at any later time to absolutely correlate tissue or other biological specimen with that individual.

**EXAMPLE 18****Southern Blot Forensic Identification**

The procedure of Example 17 is repeated to obtain a panel of from 10 to 2000 amplified sequences from an individual and a specimen. This PCR-generated DNA is then digested with one or a combination of, preferably, four base specific restriction enzymes. Such enzymes are commercially available and known to those of skill in the art. After digestion, the resultant gene fragments are size separated in multiple duplicate wells on an agarose gel and transferred to nitrocellulose using Southern blotting techniques well known to those with skill in the art. For a review of Southern

blotting see Davis et al. (Basic Methods in Molecular Biology, 1986, Elsevier Press. pp 62-65).

5 A panel of ESTs or complete cDNA sequences from Examples 1, 2, and/or 13, or fragments thereof of at least 15 bases, are radioactively or colorimetrically labeled using end-labeled oligonucleotides derived from the ESTs, nick translated sequences or the like using methods known in the art and hybridized to the Southern blot using techniques known in the art (Davis et al., supra). Preferably, at least 10 5 to 10 of these labeled probes are used, and more preferably at least about 20 or 30 are used to provide a unique pattern. The resultant bands appearing from the hybridization of a large sample of ESTs will be a unique identifier. Since the restriction enzyme cleavage will be different for every 15 individual, the band pattern on the Southern blot will also be unique. Increasing the number of EST probes will provide a statistically higher level of confidence in the identification since there will be an increased number of sets of bands used for identification.

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#### EXAMPLE 19

##### Dot Blot Identification Procedure

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Another technique for identifying individuals using the sequences disclosed herein utilizes a dot blot hybridization technique.

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Genomic DNA is isolated from nuclei of subject to be identified. Oligonucleotide probes of approximately 30 bp in length were synthesized that correspond to sequences from the ESTs. The probes are used to hybridize to the genomic DNA through conditions known to those in the art. The oligonucleotides are end labelled with  $P^{32}$  using polynucleotide kinase (Pharmacia). Dot Blots are created by 35 spotting about 50 ng cDNA of at least 10, preferably at least 50 sequences corresponding to a variety of the Sequence ID

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5 NOS provided in Table 7 onto nitrocellulose or the like using  
a vacuum dot blot manifold (BioRad, Richmond California).  
The nitrocellulose filter containing the EST clone sequences  
is baked or UV linked to the filter, prehybridized and  
10 hybridized with labeled probe using techniques known in the  
art (Davis et al. supra). The  $^{32}\text{P}$  labeled DNA fragments are  
sequentially hybridized with successively stringent  
conditions to detect minimal differences between the 30 bp  
sequence and the DNA. Tetramethylammonium chloride is useful  
15 for identifying clones containing small numbers of nucleotide  
mismatches (Wood et al., Proc. Natl. Acad. Sci. USA  
82(6):1585-1588 (1985) which is hereby incorporated by  
reference. A unique pattern of dots distinguishes one  
individual from another individuals.

#### EXAMPLE 20

##### Alternative "Fingerprint" Identification Technique

20 EST sequences and the corresponding complete cDNA  
sequences can be used to create a unique fingerprint for an  
individual. Thus pools of EST sequences can be used in  
forensics, paternity suits or the like to differentiate one  
individual from another.

25 Entire EST sequences can be used; similarly  
oligonucleotides can be prepared from EST sequences. In this  
example, 20-mer oligonucleotides are prepared from 200 EST  
sequences using commercially available oligonucleotide  
services such as Oligos Etc., Wilsonville, OR. Patient cell  
30 samples are processed for DNA using techniques well known to  
those with skill in the art. The nucleic acid is digested  
with restriction enzymes EcoRI and XbaI. Following  
digestion, samples are applied to wells for electrophoresis.  
The procedure, as known in the art, may be modified to  
35 accommodate polyacrylamide electrophoresis, however in this  
example, samples containing 5 ug of DNA are loaded into wells

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and separated on 0.8% agarose gels. The gels are transferred using Southern blotting techniques onto nitrocellulose.

10 ng of each of the oligos are pooled and end-labeled with  $P^{32}$ . The nitrocellulose is prehybridized with blocking solution and hybridized with the labeled probes. Following hybridization and washing, the nitrocellulose filter is exposed to X-Omat AR X-ray film. The resulting hybridization pattern will be unique for each individual.

It is additionally contemplated within this example that the representative number of EST sequences can be varied for additional accuracy or clarity.

#### EXAMPLE 21

##### Identification of genes associated with hereditary diseases

This example illustrates an approach useful for the association of EST sequences with particular phenotypic characteristics. In this example, a particular EST is used as a test probe to associate that EST with a particular phenotypic characteristic.

An EST clone corresponding to EST01643, (SEQ ID NO 1894) maps to a gene rich region of chromosome 6. EST clone HHCMH89, from which EST01643 was derived, was mapped to chromosome 6p21 by Dr. Julie Korenberg of UCLA/Cedar Sinai Hospital using FISH. A search of Mendelian Inheritance in Man (supra) revealed 6p21 to be a very gene rich region containing several known genes and several diseases for which genes have not been identified. The cDNA encoded by EST clone HHCMH89 thus becomes an immediate candidate for each of these genetic diseases.

Cells from patients with these diseases are isolated and expanded in culture. PCR primers from the EST sequences are used to screen genomic DNA and RNA or cDNA from the patients. ESTs that are not amplified in the patients can be positively associated with a particular disease by further analysis.



## EXAMPLE 22

Identification of a gene associated with  
Angelman's disease

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Angelman's disease (AD) is characterized by deletions on the long arm of chromosome 15 (15q11q13) (Williams et al. Am. J. Med. Genet. 32:339-345 (1989) hereby incorporated by reference). The symptoms of the disease include developmental delay, seizures, inappropriate laughter and ataxic movements. These symptoms suggest that the disorder is a neurologic deficiency. This prophetic example illustrates how ESTs, preferably obtained from a cDNA library from human brain, may be used in identifying the defective gene or genes associated with Angelman's Disease. (The example is based on analogous work with genomic DNA, rather than cDNA and ESTs, in identifying the genetic defect associated with Angelman's Disease.) This example also illustrates how EST sequences may generally be used for identifying gene sequences associated with an inherited disease that is mapped to a chromosome location.

ESTs are screened using techniques described in Example 5 and Example 7 to identify those ESTs that localize to the long arm of chromosome 15 and preferably localize to chromosome 15 bands 15q11q13 from normal patients. ESTs that bind to the long arm of chromosome 15 are hybridized to chromosome 15 from AD patients. These studies are preferably performed using either fluorescence in situ hybridization or using somatic cell hybrids that contain fragments from the long arm of chromosome 15 from AD patients. Those chromosome 15-specific ESTs that do not map to chromosome 15 from AD patients are useful as markers for Angelman's Disease and can be incorporated into diagnostics for genetic screening. These ESTs are associated with chromosome deletions present in Angelman's disease. Identification of the gene associated with these AD negative ESTs and an analysis of the polypeptides encoded by the genes

from normal patients is essential for providing gene or other therapies for AD patients.

Genetic diseases are not always accompanied by gene deletions. Therefore, it is also important to use the ESTs that bind to bands 15q11q13 from AD patients as tools to identify the polymorphisms present within the disease population. Restriction fragment length polymorphism (RFLP) analysis can be performed on patient cells from AD disease or from somatic cell hybrids created using the long arm of chromosome 15. For a review of RFLP techniques see Donis-Keller et al. (Cell 51:319-337 (1987) hereby incorporated by reference). DNA is isolated from the somatic cell lines or from cells from AD patients. The DNA is digested with one or more restriction enzymes according to techniques of Donis-Keller et al. The resulting fragments are separated by gel electrophoresis, denatured, transferred to nitrocellulose and hybridized with the selected radio-labeled ESTs that localize to the region of interest. The autoradiographic pattern is compared both to a number of AD patients and to normal patients. Common patterns of EST hybridization in AD patients that are not present in normal patients indicates that the genes associated with these ESTs are candidate genes affected by AD.

cDNA libraries are prepared from the somatic cell hybrids from AD patients. Libraries are prepared using Lambda Zap II Library Kits (Stratagene, La Jolla, California) or other commercially available library kits. The ESTs of interest are used as probes to identify those bacterial colonies carrying genes corresponding to the EST probes. Positive clones are sequenced and the sequences are compared to homologous gene sequences derived from normal patients.

Alterations, including deletions and substitutions, within gene sequences, associated with bands 15q11q13, are thus positively identified and associated with AD disease. Wagstaff et al. were able to identify deletions and substitutions in sequences encoding the GABA<sub>A</sub> receptor

protein subunit from patients with Angelman's disease (*Am. J. Hum. Genet.* 49:330-337, (1991)). It is likely that other genes will additionally be associated with the disease.

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**EXAMPLE 23****Preparation and Use of Antisense Oligonucleotides**

10 Antisense RNA molecules are known to be useful for regulating translation within the cell. Antisense RNA molecules can be produced from EST sequences or from the corresponding gene sequences. These antisense molecules can be used as diagnostic probes to determine whether or not a particular gene is expressed in a cell. Similarly, the  
15 antisense molecules can be used as a therapeutic to regulate gene expression once the EST is associated with a particular disease (see Example 22).

The antisense molecules are obtained from a nucleotide sequence by reversing the orientation of the coding region with regard to the promoter. Thus, the antisense RNA is  
20 complementary to the corresponding mRNA. For a review of antisense design see Green et al., *Ann. Rev. Biochem.* 55:569-597 (1986), which is hereby incorporated by reference. The antisense sequences can contain modified sugar phosphate  
25 backbones to increase stability and make them less sensitive to RNase activity. Examples of the modifications are described by Rossi et al., *Pharmacol. Ther.* 50(2):245-254, (1991).

30 Antisense molecules are introduced into cells that express the gene corresponding to the EST of interest in culture. In a preferred application of this invention, the polypeptide encoded by the gene is first identified, so that the effectiveness of antisense inhibition on translation can be monitored using techniques that include but are not  
35 limited to antibody-mediated tests such as RIAs and ELISA, functional assays, or radiolabelling. The antisense molecule is introduced into the cells by diffusion or by transfection

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procedures known in the art. The molecules are introduced onto cell samples at a number of different concentrations preferably between  $1 \times 10^{-10} \text{M}$  to  $1 \times 10^{-4} \text{M}$ . Once the minimum concentration that can adequately control translation is identified, the optimized dose is translated into a dosage suitable for use in vivo. For example, an inhibiting concentration in culture of  $1 \times 10^{-7}$  translates into a dose of approximately 0.6 mg/kg bodyweight. Levels of oligonucleotide approaching 100 mg/kg bodyweight or higher may be possible after testing the toxicity of the oligonucleotide in laboratory animals.

The antisense can be introduced into the body as a bare or naked oligonucleotide, oligonucleotide encapsulated in lipid, oligonucleotide sequence encapsidated by viral protein, or as oligonucleotide contained in an expression vector such as those described in Example 25. The antisense oligonucleotide is preferably introduced into the vertebrate by injection. It is additionally contemplated that cells from the vertebrate are removed, treated with the antisense oligonucleotide, and reintroduced into the vertebrate. It is further contemplated that the antisense oligonucleotide sequence is incorporated into a ribozyme sequence to enable the antisense to bind and cleave its target. For technical applications of ribozyme and antisense oligonucleotides see Rossi et al.

#### EXAMPLE 24

##### Preparation and use of Triple Helix Probes

Triple helix oligonucleotides are used to inhibit transcription from a genome. They are particularly useful for studying alterations in cell activity as it is associated with a particular gene. The EST sequences or complete sequences of the present invention or, more preferably, a portion of those sequences, can be used to inhibit gene

expression in individuals having diseases associated with a particular gene. Similarly, a portion of the EST or corresponding gene sequence can be used to study the effect of inhibiting transcription of a particular gene within a cell. Traditionally, homopurine sequences were considered the most useful. However, homopyrimidine sequences can also inhibit gene expression. Thus, both types of sequences from either the EST or from the gene corresponding to the EST are contemplated within the scope of this invention. Homopyrimidine oligonucleotides bind to the major groove at homopurine:homopyrimidine sequences. As an example, 10-mer to 20-mer homopyrimidine sequences from the ESTs can be used to inhibit expression from homopurine sequences. SEQ ID NOs such as 282, 888, 719, 670, 994, 240, 873 and 761 contain homopyrimidine 15-mers. Moreover the natural (beta) anomers of the oligonucleotide units can be replaced with alpha anomers to render the oligonucleotide more resistant to nucleases. Further, an intercalating agent such as ethidium bromide, or the like, can be attached to the 3' end of the alpha oligonucleotide to stabilize the triple helix. For information on the generation of oligonucleotides suitable for triple helix formation see Griffin et al. (*Science* 245:967-971 (1989)), which is hereby incorporated by this reference).

The oligonucleotides may be prepared on an oligonucleotide synthesizer or they may be purchased commercially from a company specializing in custom oligonucleotide synthesis. The sequences are introduced into cells in culture using techniques known in the art that include but are not limited to calcium phosphate precipitation, DEAE-Dextran, electroporation, liposome-mediated transfection or native uptake. Treated cells are monitored for altered cell function. These cell functions are predicted based upon the homologies of the gene, corresponding to the EST from which the oligonucleotide was derived, with known genes sequences that have been associated

with a particular function. The cell functions can also be predicted based on the presence of abnormal physiologies within cells derived from individuals with a particular inherited disease, particularly when the EST is associated with the disease using techniques described in Example 22.

#### EXAMPLE 25

##### Gene expression from DNA Sequences Corresponding to ESTs

A gene sequence of the present invention coding for all or part of a human gene product is introduced into an expression vector using conventional technology. (Techniques to transfer cloned sequences into expression vectors that direct protein translation in mammalian, yeast, insect or bacterial expression systems are well known in the art.) Commercially available vectors and expression systems are available from a variety of suppliers including Stratagene (La Jolla, California), Promega (Madison, Wisconsin), and Invitrogen (San Diego, California). If desired, to enhance expression and facilitate proper protein folding, the codon context and codon pairing of the sequence may be optimized for the particular expression organism, as explained by Hatfield, et al., U.S. Patent No. 5,082,767, incorporated herein by this reference.

The following is provided as one exemplary method to generate polypeptide from cloned cDNA sequences. The cDNA from the EST of interest is sequenced to identify the methionine initiation codon for the gene and the poly A sequence. If the cDNA lacks a poly A sequence, this sequence can be added to the construct by, for example, splicing out the Poly A sequence from pSG5 (Stratagene) using BglI and SalI restriction endonuclease enzymes and incorporating it into the mammalian expression vector pXT1 (Stratagene). pXT1 contains the LTRs and a portion of the gag gene from Moloney Murine Leukemia Virus. The position of the LTRs in the construct allow efficient stable transfection. The vector

includes the Herpes Simplex Thymidine Kinase promoter and the selectable neomycin gene. The cDNA is obtained by PCR from the bacterial vector using oligonucleotide primers complementary to the cDNA and containing restriction endonuclease sequences for Pst I incorporated into the 5' primer and BglII at the 5' end of the corresponding cDNA 3' primer, taking care to ensure that the cDNA is positioned inframe with the poly A sequence. The purified fragment obtained from the resulting PCR reaction is digested with PstI, blunt ended with an exonuclease, digested with Bgl II, purified and ligated to pXT1, now containing a poly A sequence and digested BglII.

The ligated product is transfected into mouse NIH 3T3 cells using Lipofectin (Life Technologies, Inc., Grand Island, New York) under conditions outlined in the product specification. Positive transfectants are selected after growing the transfected cells in 600ug/ml G418 (Sigma, St. Louis, Missouri). The protein is preferably released into the supernatant. However if the protein has membrane binding domains, the protein may additionally be retained within the cell or expression may be restricted to the cell surface.

Since it may be necessary to purify and locate the transfected product, synthetic 15-mer peptides synthesized from the predicted cDNA sequence are injected into mice to generate antibody to the polypeptide encoded by the cDNA.

If antibody production is not possible, the cDNA sequence is additionally incorporated into eukaryotic expression vectors and expressed as a chimeric with, for example,  $\beta$ -globin. Antibody to  $\beta$ -globin is used to purify the chimeric. Corresponding protease cleavage sites engineered between the  $\beta$ -globin gene and the cDNA are then used to separate the two polypeptide fragments from one another after translation. One useful expression vector for generating  $\beta$ -globin chimerics is pSG5 (Stratagene). This vector encodes rabbit  $\beta$ -globin. Intron II of the rabbit  $\beta$ -globin gene facilitates splicing of the expressed transcript,

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and the polyadenylation signal incorporated into the construct increases the level of expression. These techniques as described are well known to those skilled in the art of molecular biology. Standard methods are published in methods texts such as Davis et al. and many of the methods are available from the technical assistance representatives from Stratagene, Life Technologies, Inc., or Promega. Polypeptide may additionally be produced from either construct using in vitro translation systems such as In vitro Express<sup>TM</sup> Translation Kit (Stratagene).

#### Example 26

##### Production of an Antibody to a Human Protein

Substantially pure protein or polypeptide is isolated from the transfected or transformed cells as described in Example 25. Concentration of protein in the final preparation is adjusted, for example, by concentration on an Amicon filter device, to the level of a few micrograms/ml. Monoclonal or polyclonal antibody to the protein can then be prepared as follows:

##### A. Monoclonal Antibody Production by Hybridoma Fusion

Monoclonal antibody to epitopes of any of the peptides identified and isolated as described can be prepared from murine hybridomas according to the classical method of Kohler, G. and Milstein, C., *Nature* 256:495 (1975) or derivative methods thereof. Briefly, a mouse is repetitively inoculated with a few micrograms of the selected protein over a period of a few weeks. The mouse is then sacrificed, and the antibody producing cells of the spleen isolated. The spleen cells are fused by means of polyethylene glycol with mouse myeloma cells, and the excess unfused cells destroyed by growth of the system on selective media comprising aminopterin (HAT media). The successfully fused cells are diluted and aliquots of the dilution placed in wells of a



microtiter plate where growth of the culture is continued. Antibody-producing clones are identified by detection of antibody in the supernatant fluid of the wells by immunoassay procedures, such as Elisa, as originally described by Engvall, E., *Meth. Enzymol.* 70:419 (1980), and derivative methods thereof. Selected positive clones can be expanded and their monoclonal antibody product harvested for use. Detailed procedures for monoclonal antibody production are described in Davis, L. et al. **Basic Methods in Molecular Biology** Elsevier, New York. Section 21-2.

**B. Polyclonal Antibody Production by Immunization**

Polyclonal antiserum containing antibodies to heterogenous epitopes of a single protein can be prepared by immunizing suitable animals with the expressed protein described above, which can be unmodified or modified to enhance immunogenicity. Effective polyclonal antibody production is affected by many factors related both to the antigen and the host species. For example, small molecules tend to be less immunogenic than other and may require the use of carriers and adjuvant. Also, host animals vary in response to site of inoculations and dose, with both inadequate or excessive doses of antigen resulting in low titer antisera. Small doses (ng level) of antigen administered at multiple intradermal sites appears to be most reliable. An effective immunization protocol for rabbits can be found in Vaitukaitis, J. et al. *J. Clin. Endocrinol. Metab.* 33:988-991 (1971).

Booster injections can be given at regular intervals, and antiserum harvested when antibody titer thereof, as determined semi-quantitatively, for example, by double immunodiffusion in agar against known concentrations of the antigen, begins to fall. See, for example, Ouchterlony, O. et al., Chap. 19 in: **Handbook of Experimental Immunology** D. Wier (ed) Blackwell (1973). Plateau concentration of antibody is usually in the range of 0.1 to 0.2 mg/ml of serum (about 12  $\mu$ M). Affinity of the antisera for the antigen is

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determined by preparing competitive binding curves, as described, for example, by Fisher, D., Chap. 42 in: **Manual of Clinical Immunology**, 2d Ed. (Rose and Friedman, eds.) Amer. Soc. For Microbiol., Washington, D.C. (1980).

5       Antibody preparations prepared according to either protocol are useful in quantitative immunoassays which determine concentrations of antigen-bearing substances in biological samples; they are also used semi-quantitatively or qualitatively to identify the presence of antigen in a  
10       biological sample.

#### EXAMPLE 27

##### Identification of Tissue Types or Cell Species by Means of Labeled Tissue Specific Antibodies

15       Identification of specific tissues is accomplished by the visualization of tissue specific antigens by means of antibody preparations according to Example 26 which are conjugated, directly or indirectly to a detectable marker.  
20       Selected labeled antibody species bind to their specific antigen binding partner in tissue sections, cell suspensions, or in extracts of soluble proteins from a tissue sample to provide a pattern for qualitative or semi-qualitative interpretation.

25       Antisera for these procedures must have a potency exceeding that of the native preparation, and for that reason, antibodies are concentrated to a mg/ml level by isolation of the gamma globulin fraction, for example, by ion-exchange chromatography or by ammonium sulfate  
30       fractionation. Also, to provide the most specific antisera, unwanted antibodies, for example to common proteins, must be removed from the gamma globulin fraction, for example by means of insoluble immunoabsorbents, before the antibodies are labeled with the marker. Either monoclonal or  
35       heterologous antisera is suitable for either procedure.

#### A. Immunohistochemical Techniques

Purified, high-titer antibodies, prepared as described above, are conjugated to a detectable marker, as described, for example, by Fudenberg, H., Chap. 26 in: **Basic & Clinical Immunology**, 3rd Ed. Lange, Los Altos, California (1980) or Rose, N. et al., Chap. 12 in: **Methods in Immunodiagnosis**, 2d Ed. John Wiley & Sons, New York (1980).

A fluorescent marker, either fluorescein or rhodamine, is preferred, but antibodies can also be labeled with an enzyme that supports a color producing reaction with a substrate, such as horseradish peroxidase. Markers can be added to tissue-bound antibody in a second step, as described below. Alternatively, the specific antitissue antibodies can be labeled with ferritin or other electron dense particles, and localization of the ferritin coupled antigen-antibody complexes achieved by means of an electron microscope. In yet another approach, the antibodies are radiolabeled, with, for example  $^{125}\text{I}$ , and detected by overlaying the antibody treated preparation with photographic emulsion.

Preparations to carry out the procedures can comprise monoclonal or polyclonal antibodies to a single gene copy or protein, identified as specific to a tissue type, for example, brain tissue, or antibody preparations to several antigenically distinct tissue specific antigens can be used in panels, independently or in mixtures, as required.

Tissue sections and cell suspensions are prepared for immunohistochemical examination according to common histological techniques. Multiple cryostat sections (about 4  $\mu\text{m}$ , unfixed) of the unknown tissue and known control, are mounted and each slide covered with different dilutions of the antibody preparation. Sections of known and unknown tissues should also be treated with preparations to provide a positive control, a negative control, for example, pre-immune sera, and a control for non-specific staining, for example, buffer.

Treated sections are incubated in a humid chamber for 30 min at room temperature, rinsed, then washed in buffer for 30-45 min. Excess fluid is blotted away, and the marker developed.

5 If the tissue specific antibody was not labeled in the first incubation, it can be labeled at this time in a second antibody-antibody reaction, for example, by adding fluorescein- or enzyme-conjugated antibody against the immunoglobulin class of the antiserum-producing species, for  
10 example, fluorescein labeled antibody to mouse IgG. Such labeled sera are commercially available.

The antigen found in the tissues by the above procedure can be quantified by measuring the intensity of color or fluorescence on the tissue section, and calibrating that  
15 signal using appropriate standards.

#### **B. Identification of Tissue Specific Soluble Proteins**

The visualization of tissue specific proteins and identification of unknown tissues from that procedure is carried out using the labeled antibody reagents and detection  
20 strategy as described for immunohistochemistry; however the sample is prepared according to an electrophoretic technique to distribute the proteins extracted from the tissue in an orderly array on the basis of molecular weight for detection.

A tissue sample is homogenized using a Virtis apparatus; cell suspensions are disrupted by Dounce homogenization or osmotic lysis, using detergents in either case as required to  
25 disrupt cell membranes, as is the practice in the art. Insoluble cell components such as nuclei, microsomes, and membrane fragments are removed by ultracentrifugation, and the soluble protein-containing fraction concentrated if  
30 necessary and reserved for analysis.

A sample of the soluble protein solution is resolved into individual protein species by conventional SDS polyacrylamide electrophoresis as described, for example, by  
35 Davis, L. et al., Section 19-2 in: **Basic Methods in Molecular Biology** (P. Leder, ed), Elsevier, New York (1986), using a

range of amounts of polyacrylamide in a set of gels to resolve the entire molecular weight range of proteins to be detected in the sample. A size marker is run in parallel for purposes of estimating molecular weights of the constituent proteins. Sample size for analysis is a convenient volume of from 5-50  $\mu$ l, and containing from about 1 to 100  $\mu$ g protein. An aliquot of each of the resolved proteins is transferred by blotting to a nitrocellulose filter paper, a process that maintains the pattern of resolution. Multiple copies are prepared. The procedure, known as Western Blot Analysis, is well described in Davis, L. et al., (above) Section 19-3. One set of nitrocellulose blots is stained with Coomassie Blue dye to visualize the entire set of proteins for comparison with the antibody bound proteins. The remaining nitrocellulose filters are then incubated with a solution of one or more specific antisera to tissue specific proteins prepared as described in Example 26. In this procedure, as in procedure A above, appropriate positive and negative sample and reagent controls are run.

In either procedure A or B, a detectable label can be attached to the primary tissue antigen-primary antibody complex according to various strategies and permutations thereof. In a straightforward approach, the primary specific antibody can be labeled; alternatively, the unlabeled complex can be bound by a labeled secondary anti-IgG antibody. In other approaches, either the primary or secondary antibody is conjugated to a biotin molecule, which can, in a subsequent step, bind an avidin conjugated marker. According to yet another strategy, enzyme labeled or radioactive protein A, which has the property of binding to any IgG, is bound in a final step to either the primary or secondary antibody.

The visualization of tissue specific antigen binding at levels above those seen in control tissues to one or more tissue specific antibodies, prepared from the gene sequences identified from EST sequences, can identify tissues of unknown origin, for example, forensic samples, or

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differentiated tumor tissue that has metastasized to foreign bodily sites.

The entire contents of all references cited above are hereby incorporated by reference.

5 While the present invention has been described in some detail for purposes of clarity and understanding, one skilled in the art will appreciate that various changes in form and detail can be made without departing from the true scope of the invention.

#### 10 VII. Correlation of EST and Clone Identifiers

The EST sequences of the present invention are identified herein by SEQ ID NO, and are identified in the GenBank database by a different number, are identified in the  
15 inventors' lab (and upcoming publications) by EST number, and clones have been submitted to the American Type Culture Collection (Rockville, Maryland USA) under clone names. Table 12 cross references those different numbers for the ESTs from cDNA, SEQ ID NOS 1-2409.

20 Certain Sequence ID NOS are excluded from some claims based on their homology to known non-human sequences (See Table 2).

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2	EST00009	M61959	HFBAD5	65	EST00067	M62011	HCC18	129	EST00052	M62191	HCC57
3	EST00010	M61961	HFBAD7	66	EST000351	M62280	HCC21	130	EST00321	M62254	HCC60
4	EST00011	M61962	HFBAD8	67	EST000351	M62280	HCC21	131	EST00355	M62283	HCC61
5	EST00012	M61963	HFBAD10	68	EST00068	M62012	HCC22	132	EST00322	M62255	HCC63
6	EST00013	M61964	HFBAD11	69	EST00068	M62287	HCC23	133	EST00110	M62054	HCC65
7	EST00014	M61965	HFBAD11	70	EST00070	M62014	HCC29	134	EST00111	M62055	HCC66
8	EST00014	M61965	HFBAD11	71	EST00071	M62015	HCC29	135	EST00375	M62186	HCC67
9	EST00014	M61965	HFBAD11	72	EST00072	M62016	HCC31	136	EST00112	M62056	HCC68
10	EST00018	M61967	HFBAD23	73	EST00073	M62017	HCC31	137	EST00113	M62057	HCC70
11	EST00018	M61967	HFBAD23	74	EST00074	M62018	HCC40	138	EST00114	M62058	HCC72
12	EST00024	M62212	HFBAD51	75	EST00075	M62019	HCC40	139	EST00116	M62059	HCC85
13	EST00024	M62212	HFBAD51	76	EST00075	M62019	HCC40	140	EST00117	M62060	HCC85
14	EST00055	M62194	HFBAD51	77	EST00257	M62196	HCC42	141	EST00118	M62061	HCC85
15	EST00055	M62194	HFBAD51	78	EST00258	M62197	HCC42	142	EST00119	M62062	HCC85
16	EST00019	M61959	HFBAD66	79	EST00077	M62020	HCC64	143	EST00120	M62063	HCC85
17	EST00020	M61970	HFBAD69	80	EST00077	M62021	HCC67	144	EST00121	M62064	HCC89
18	EST00022	M61972	HFBAD71	81	EST00315	M62022	HCC70	145	EST00122	M62065	HCC89
19	EST00022	M61972	HFBAD71	82	EST00078	M62023	HCC72	146	EST00122	M62065	HCC89
20	EST00022	M61972	HFBAD71	83	EST00079	M62024	HCC74	147	EST00122	M62065	HCC89
21	EST00024	M61974	HFBAD86	84	EST00080	M62025	HCC77	148	EST00122	M62065	HCC89
22	EST00024	M61974	HFBAD86	85	EST00081	M62026	HCC77	149	EST00123	M62066	HCC89
23	EST000301	M62239	HFBAD90	86	EST00082	M62026	HCC77	150	EST00124	M62067	HCC89
24	EST00026	M61976	HFBAD90	87	EST00083	M62027	HCC80	151	EST00125	M62068	HCC89
25	EST00027	M61977	HFBAD90	88	EST00084	M62028	HCC01	152	EST00126	M62069	HCC89
26	EST00028	M61977	HFBAD90	89	EST00084	M62028	HCC01	153	EST00127	M62070	HCC89
27	EST000310	M62245	HCCAD05	90	EST00085	M62029	HCC02	154	EST00128	M62071	HCC89
28	EST00029	M61979	HCCAD08	91	EST00302	M62240	HCC03	155	EST00129	M62072	HCC89
29	EST00030	M61980	HCCAD09	92	EST00086	M62030	HCC03	156	EST00130	M62073	HCC89
30	EST00031	M61981	HCCAD09	93	EST00087	M62031	HCC06	157	EST00131	M62074	HCC89
31	EST00032	M61982	HCCAD104	94	EST00353	M62281	HCC10	158	EST00132	M62075	HCC89
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36	EST00036	M61986	HCCAD18	99	EST00316	M62249	HCC30	163	EST00134	M62077	HCC89
37	EST00037	M61987	HCCAD21	100	EST00090	M62034	HCC04	164	EST00135	M62078	HCC89
38	EST00038	M61988	HCCAD23	101	EST00091	M62035	HCC05	165	EST00136	M62079	HCC89
39	EST000374	M62300	HCCAD53	102	EST00248	M62187	HCC06	166	EST00137	M62080	HCC89
40	EST00039	M61989	HCCAD53	103	EST00317	M62250	HCC07	167	EST00138	M62081	HCC89
41	EST00040	M61990	HCCAD54	104	EST000354	M62250	HCC08	168	EST00140	M62082	HCC89
42	EST00041	M61991	HCCAD54	105	EST000365	M62281	HCC10	169	EST00141	M62083	HCC89
43	EST00042	M61992	HCCAD55	106	EST00092	M62036	HCC12	170	EST00295	M62233	HCC105
44	EST000371	M62297	HCCAD57	107	EST00093	M62037	HCC13	171	EST00327	M62259	HCC110
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47	EST00046	M61995	HCCAD69	110	EST00096	M62040	HCC20	174	EST00143	M62084	HCC117
48	EST00291	M62229	HCCAD71	111	EST000281	M62218	HCC01	175	EST00296	M62234	HCC127
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50	EST00048	M61997	HCCAD79	113	EST00097	M62041	HCC07	177	EST00328	M62260	HCC136
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52	EST00052	M61999	HCCB08	115	EST00099	M62043	HCC14	179	EST00145	M62087	HCC147
53	EST00054	M62000	HCCB16	116	EST00100	M62044	HCC18	180	EST00297	M62237	HCC154
54	EST00055	M62001	HCCB35	117	EST000319	M62252	HCC25	181	EST00147	M62088	HCC155
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58	EST00059	M62005	HCCB57	121	EST00104	M62048	HCC35				
59	EST00061	M62006	HCCB60	122	EST00105	M62049	HCC36				
60	EST00062	M62007	HCCB62	123	EST00106	M62050	HCC38				
61	EST00064	M62008	HCCB64	124	EST00107	M62051	HCC40				
62	EST00065	M62009	HCCB66	125	EST00108	M62052	HCC41				
63	EST00065	M62009	HCCB66	126	EST00109	M62053	HCC44				
				127	EST00320	M62253	HCC51				

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183	EST00148	M62089	HHC161	318	EST000380	M78232	HEFBA04	318	EST000380	M78232	HEFBA04
184	EST00149	M62090	HHC162	319	EST000381	M78233	HEFBA07	319	EST000381	M78233	HEFBA07
185	EST00150	M62091	HHC173	320	EST000382	M78234	HEFBA07	320	EST000382	M78234	HEFBA07
186	EST00151	M62092	HHC175	321	EST000383	M78235	HEFBA09	321	EST000383	M78235	HEFBA09
187	EST00152	M62093	HHC179	322	EST000384	M78236	HEFBA09	322	EST000384	M78236	HEFBA09
188	EST00256	M62195	HHC184	323	EST000385	M85319	HEFBA10	323	EST000385	M85319	HEFBA10
189	EST00282	M62199	HHC185	324	EST000386	M78238	HEFBA11	324	EST000386	M78238	HEFBA11
190	EST00153	M62094	HHC186	325	EST000387	M78239	HEFBA13	325	EST000387	M78239	HEFBA13
191	EST00154	M62095	HHC188	326	EST000388	M78240	HEFBA18	326	EST000388	M78240	HEFBA18
192	EST00155	M62096	HHC190	327	EST000389	M78241	HEFBA18	327	EST000389	M78241	HEFBA18
193	EST00156	M62097	HHC192	328	EST000390	M78242	HEFBA21	328	EST000390	M78242	HEFBA21
194	EST00157	M62098	HHC193	329	EST000391	M78243	HEFBA23	329	EST000391	M78243	HEFBA23
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197	EST00160	M62101	HHC196	332	EST000394	M78246	HEFBA24	332	EST000394	M78246	HEFBA24
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209	EST00331	M62111	HHC208	344	EST000406	M78258	HEFBA24	344	EST000406	M78258	HEFBA24
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213	EST00170	M62115	HHC212	348	EST000410	M85323	HEFBA24	348	EST000410	M85323	HEFBA24
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375	EST00429	M78281	HFBA31	441	EST00481	M78333	HFBA21	508	EST00531	M78383	HFBC14	508	EST00531	M78383	HFBC14
376	EST01436	M78282	HFBA32	442	EST01455	M78772	HFBA23	509	EST01472	M78384	HFBC15	509	EST01472	M78384	HFBC15
377	EST00430	M78283	HFBA33	443	EST00482	M78334	HFBA24	510	EST00532	M78385	HFBC16	510	EST00532	M78385	HFBC16
378	EST00431	M78284	HFBA34	444	EST00483	M78335	HFBA25	511	EST00533	M78386	HFBC17	511	EST00533	M78386	HFBC17
379	EST00432	M78285	HFBA35	445	EST00484	M78336	HFBA26	512	EST00534	M78387	HFBC18	512	EST00534	M78387	HFBC18
380	EST01439	M78286	HFBA36	446	EST00485	M78337	HFBA27	513	EST00535	M78388	HFBC19	513	EST00535	M78388	HFBC19
381	EST00433	M78287	HFBA37	447	EST00486	M78338	HFBA28	514	EST00536	M78389	HFBC20	514	EST00536	M78389	HFBC20
382	EST00434	M78288	HFBA38	448	EST00487	M78339	HFBA29	515	EST00537	M78390	HFBC21	515	EST00537	M78390	HFBC21
383	EST00435	M78289	HFBA39	449	EST00488	M78340	HFBA30	516	EST00538	M78391	HFBC22	516	EST00538	M78391	HFBC22
384	EST01440	M78290	HFBA40	450	EST00489	M78341	HFBA31	517	EST00539	M78392	HFBC23	517	EST00539	M78392	HFBC23
385	EST00436	M78291	HFBA41	451	EST00490	M78342	HFBA32	518	EST00540	M78393	HFBC24	518	EST00540	M78393	HFBC24
386	EST00437	M78292	HFBA42	452	EST00491	M78343	HFBA33	519	EST00541	M78394	HFBC25	519	EST00541	M78394	HFBC25
387	EST00438	M78293	HFBA43	453	EST00492	M78344	HFBA34	520	EST00542	M78395	HFBC26	520	EST00542	M78395	HFBC26
388	EST00439	M78294	HFBA44	454	EST00493	M78345	HFBA35	521	EST01474	M78396	HFBC27	521	EST01474	M78396	HFBC27
389	EST00440	M78295	HFBA45	455	EST00494	M78346	HFBA36	522	EST00543	M78397	HFBC28	522	EST00543	M78397	HFBC28
390	EST01442	M78296	HFBA46	456	EST01483	M78347	HFBA37	523	EST00544	M78398	HFBC29	523	EST00544	M78398	HFBC29
391	EST00441	M78297	HFBA47	457	EST00495	M78348	HFBA38	524	EST00545	M78399	HFBC30	524	EST00545	M78399	HFBC30
392	EST00442	M78298	HFBA48	458	EST00496	M78349	HFBA39	525	EST00546	M78400	HFBC31	525	EST00546	M78400	HFBC31
393	EST00443	M78299	HFBA49	459	EST00497	M78350	HFBA40	526	EST00547	M78401	HFBC32	526	EST00547	M78401	HFBC32
394	EST00444	M78300	HFBA50	460	EST01457	M78351	HFBA41	527	EST00548	M78402	HFBC33	527	EST00548	M78402	HFBC33
395	EST00445	M78301	HFBA51	461	EST01458	M78352	HFBA42	528	EST00549	M78403	HFBC34	528	EST00549	M78403	HFBC34
396	EST01443	M78302	HFBA52	462	EST00498	M78353	HFBA43	529	EST00550	M78404	HFBC35	529	EST00550	M78404	HFBC35
397	EST00446	M78303	HFBA53	463	EST01459	M78354	HFBA44	530	EST01477	M78405	HFBC36	530	EST01477	M78405	HFBC36
398	EST00447	M78304	HFBA54	464	EST00499	M78355	HFBA45	531	EST00551	M78406	HFBC37	531	EST00551	M78406	HFBC37
399	EST00448	M78305	HFBA55	465	EST00500	M78356	HFBA46	532	EST00552	M78407	HFBC38	532	EST00552	M78407	HFBC38
400	EST00449	M78306	HFBA56	466	EST00501	M78357	HFBA47	533	EST00553	M78408	HFBC39	533	EST00553	M78408	HFBC39
401	EST00450	M78307	HFBA57	467	EST00502	M78358	HFBA48	534	EST01478	M78409	HFBC40	534	EST01478	M78409	HFBC40
402	EST00451	M78308	HFBA58	468	EST00503	M78359	HFBA49	535	EST00554	M78410	HFBC41	535	EST00554	M78410	HFBC41
403	EST00452	M78309	HFBA59	469	EST01460	M78360	HFBA50	536	EST01479	M78411	HFBC42	536	EST01479	M78411	HFBC42
404	EST00453	M78310	HFBA60	470	EST00504	M78361	HFBA51	537	EST00555	M78412	HFBC43	537	EST00555	M78412	HFBC43
405	EST00454	M78311	HFBA61	471	EST00505	M78362	HFBA52	538	EST00556	M78413	HFBC44	538	EST00556	M78413	HFBC44
406	EST00455	M78312	HFBA62	472	EST00506	M78363	HFBA53	539	EST00557	M78414	HFBC45	539	EST00557	M78414	HFBC45
407	EST00456	M78313	HFBA63	473	EST00507	M78364	HFBA54	540	EST00558	M78415	HFBC46	540	EST00558	M78415	HFBC46
408	EST00457	M78314	HFBA64	474	EST00508	M78365	HFBA55	541	EST01480	M78416	HFBC47	541	EST01480	M78416	HFBC47
409	EST01444	M78315	HFBA65	475	EST00509	M78366	HFBA56	542	EST00559	M78417	HFBC48	542	EST00559	M78417	HFBC48
410	EST00458	M78316	HFBA66	476	EST01463	M78367	HFBA57	543	EST00560	M78418	HFBC49	543	EST00560	M78418	HFBC49
411	EST00459	M78317	HFBA67	477	EST00510	M78368	HFBA58	544	EST01481	M78419	HFBC50	544	EST01481	M78419	HFBC50
412	EST01445	M78318	HFBA68	478	EST00511	M78369	HFBA59	545	EST01482	M78420	HFBC51	545	EST01482	M78420	HFBC51
413	EST01446	M78319	HFBA69	479	EST00512	M78370	HFBA60	546	EST01483	M78421	HFBC52	546	EST01483	M78421	HFBC52
414	EST00460	M78320	HFBA70	480	EST01464	M78371	HFBA61	547	EST00561	M78422	HFBC53	547	EST00561	M78422	HFBC53
415	EST00461	M78321	HFBA71	481	EST00513	M78372	HFBA62	548	EST00562	M78423	HFBC54	548	EST00562	M78423	HFBC54
416	EST00462	M78322	HFBA72	482	EST01465	M78373	HFBA63	549	EST00563	M78424	HFBC55	549	EST00563	M78424	HFBC55
417	EST00463	M78323	HFBA73	483	EST00514	M78374	HFBA64	550	EST00564	M78425	HFBC56	550	EST00564	M78425	HFBC56
418	EST00464	M78324	HFBA74	484	EST00515	M78375	HFBA65	551	EST01484	M78426	HFBC57	551	EST01484	M78426	HFBC57
419	EST00465	M78325	HFBA75	485	EST01466	M78376	HFBA66	552	EST00565	M78427	HFBC58	552	EST00565	M78427	HFBC58
420	EST00466	M78326	HFBA76	486	EST00516	M78377	HFBA67	553	EST00566	M78428	HFBC59	553	EST00566	M78428	HFBC59
421	EST00467	M78327	HFBA77	487	EST00517	M78378	HFBA68	554	EST00567	M78429	HFBC60	554	EST00567	M78429	HFBC60
422	EST01447	M78328	HFBA78	488	EST00518	M78379	HFBA69	555	EST01485	M78430	HFBC61	555	EST01485	M78430	HFBC61
423	EST00468	M78329	HFBA79	489	EST00519	M78380	HFBA70	556	EST00568	M78431	HFBC62	556	EST00568	M78431	HFBC62
424	EST01448	M78330	HFBA80	490	EST00520	M78381	HFBA71	557	EST00569	M78432	HFBC63	557	EST00569	M78432	HFBC63
425	EST00469	M78331	HFBA81	491	EST00521	M78382	HFBA72	558	EST01486	M78433	HFBC64	558	EST01486	M78433	HFBC64
426	EST00470	M78332	HFBA82	492	EST00522	M78383	HFBA73	559	EST00570	M78434	HFBC65	559	EST00570	M78434	HFBC65
427	EST01449	M78333	HFBA83	493	EST00523	M78384	HFBA74	560	EST00571	M78435	HFBC66	560	EST00571	M78435	HFBC66
428	EST01451	M78334	HFBA84	494	EST00524	M78385	HFBA75	561	EST00572	M78436	HFBC67	561	EST00572	M78436	HFBC67
429	EST00471	M78335	HFBA85	495	EST00525	M78386	HFBA76	562	EST00573	M78437	HFBC68	562	EST00573	M78437	HFBC68
430	EST00472	M78336	HFBA86	496	EST00526	M78387	HFBA77	563	EST00574	M78438	HFBC69	563	EST00574	M78438	HFBC69
431	EST00473	M78337	HFBA87	497	EST01467	M78388	HFBA78								
432	EST00474	M78338	HFBA88	498	EST01468	M78389	HFBA79								
433	EST00475	M78339	HFBA89	499	EST00527	M78390	HFBA80								
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435	EST00477	M78341	HFBA91	501	EST01469	M78392	HFBA82								
436	EST00478	M78342	HFBA92	502	EST00528	M78393	HFBA83								
437	EST00479	M78343	HFBA93	503	EST00529	M78394	HFBA84								
438	EST00480	M78344	HFBA94	504	EST01837	M78395	HFBA85								
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547	EST00577	M78429	HFBCB95	699	EST00682	M78534	HFBCD90
548	EST00578	M78430	HFBCB96	700	EST00683	M78535	HFBCD91
549	EST00579	M78431	HFBCB97	701	EST00684	M78536	HFBCD92
550	EST00580	M78432	HFBCB98	702	EST00685	M78537	HFBCD93
551	EST00581	M78433	HFBCB99	703	EST00686	M78538	HFBCD94
552	EST00582	M78434	HFBCB00	704	EST00687	M78539	HFBCD95
553	EST00583	M78435	HFBCB01	705	EST00688	M78540	HFBCD96
554	EST00584	M78436	HFBCB02	706	EST00689	M78541	HFBCD97
555	EST00585	M78437	HFBCB03	707	EST00690	M78542	HFBCD98
556	EST00586	M78438	HFBCB04	708	EST00691	M78543	HFBCD99
557	EST00587	M78439	HFBCB05	709	EST00692	M78544	HFBCD00
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559	EST00589	M78441	HFBCB07	711	EST00694	M78546	HFBCD02
560	EST00590	M78442	HFBCB08	712	EST00695	M78547	HFBCD03
561	EST00591	M78443	HFBCB09	713	EST00696	M78548	HFBCD04
562	EST00592	M78444	HFBCB10	714	EST00697	M78549	HFBCD05
563	EST00593	M78445	HFBCB11	715	EST00698	M78550	HFBCD06
564	EST00594	M78446	HFBCB12	716	EST00699	M78551	HFBCD07
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566	EST00596	M78448	HFBCB14	718	EST00701	M78553	HFBCD09
567	EST00597	M78449	HFBCB15	719	EST00702	M78554	HFBCD10
568	EST00598	M78450	HFBCB16	720	EST00703	M78555	HFBCD11
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572	EST00602	M78454	HFBCB20	724	EST00707	M78559	HFBCD15
573	EST00603	M78455	HFBCB21	725	EST00708	M78560	HFBCD16
574	EST00604	M78456	HFBCB22	726	EST00709	M78561	HFBCD17
575	EST00605	M78457	HFBCB23	727	EST00710	M78562	HFBCD18
576	EST00606	M78458	HFBCB24	728	EST00711	M78563	HFBCD19
577	EST00607	M78459	HFBCB25	729	EST00712	M78564	HFBCD20
578	EST00608	M78460	HFBCB26	730	EST00713	M78565	HFBCD21
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580	EST00610	M78462	HFBCB28	732	EST00715	M78567	HFBCD23
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586	EST00616	M78468	HFBCB34	738	EST00721		HFBCD29
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589	EST00619	M78471	HFBCB37	741	EST00724		HFBCD32
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SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
73	EST00721	W78573	HFBC66	819	EST01859	M85345	HFBCG01	885	EST01885	M85371	HFBC12	885	EST01885	M85371	HFBC12
74	EST00722	W78574	HFBC69	820	EST01860	M85346	HFBCG02	886	EST01886	M85372	HFBC15	886	EST01886	M85372	HFBC15
75	EST00723	W78575	HFBC72	821	EST01862	M85348	HFBCG09	887	EST01887	M85373	HFBC16	887	EST01887	M85373	HFBC16
76	EST01541	W77957	HFBC73	822	EST01863	M85349	HFBCG10	888	EST01888	M85374	HFBC17	888	EST01888	M85374	HFBC17
77	EST01542	W77958	HFBC74	823	EST01864	M85350	HFBCG11	889	EST01889	M85375	HFBC18	889	EST01889	M85375	HFBC18
78	EST00724	W78576	HFBC77	824	EST01865	M85351	HFBCG12	890	EST01890	M85376	HFBC20	890	EST01890	M85376	HFBC20
79	EST00725	W78577	HFBC78	825	EST01866	M85352	HFBCG13	891	EST01891	M85377	HFBC21	891	EST01891	M85377	HFBC21
80	EST00726	W78578	HFBC80	826	EST01867	M85353	HFBCG15	892	EST01892	M85378	HFBC22	892	EST01892	M85378	HFBC22
81	EST01544	W77960	HFBC82	827	EST01558	M77974	HFBCG19	893	EST01893	M85379	HFBC23	893	EST01893	M85379	HFBC23
82	EST00727	W78579	HFBC83	828	EST00767	M78620	HFBCG20	894	EST01894	M85380	HFBC24	894	EST01894	M85380	HFBC24
83	EST00728	W78580	HFBC84	829	EST00768	M77975	HFBCG21	895	EST01895	M85381	HFBC25	895	EST01895	M85381	HFBC25
84	EST00729	W78581	HFBC85	830	EST01559	M78621	HFBCG22	896	EST01896	M85382	HFBC26	896	EST01896	M85382	HFBC26
85	EST00730	W78582	HFBC86	831	EST00769	M78622	HFBCG23	897	EST01897	M85383	HFBC27	897	EST01897	M85383	HFBC27
86	EST00731	W78583	HFBC87	832	EST00770	M77976	HFBCG24	898	EST01898	M85384	HFBC28	898	EST01898	M85384	HFBC28
87	EST00732	W78584	HFBC88	833	EST01560	M78623	HFBCG25	899	EST01899	M85385	HFBC29	899	EST01899	M85385	HFBC29
88	EST00733	W78585	HFBC90	834	EST00771	M78624	HFBCG26	900	EST01900	M85386	HFBC30	900	EST01900	M85386	HFBC30
89	EST00734	W78586	HFBC91	835	EST00772	M78625	HFBCG27	901	EST01901	M85387	HFBC31	901	EST01901	M85387	HFBC31
90	EST00735	W78587	HFBC93	836	EST00773	M78626	HFBCG28	902	EST01902	M85388	HFBC32	902	EST01902	M85388	HFBC32
91	EST01546	W77962	HFBC94	837	EST01561	M78627	HFBCG29	903	EST01903	M85389	HFBC33	903	EST01903	M85389	HFBC33
92	EST00736	W77963	HFBC95	838	EST00774	M78628	HFBCG30	904	EST01904	M85390	HFBC34	904	EST01904	M85390	HFBC34
93	EST01547	W77964	HFBC96	839	EST01562	M78629	HFBCG31	905	EST01905	M85391	HFBC35	905	EST01905	M85391	HFBC35
94	EST01548	W77965	HFBCF01	840	EST00775	M78630	HFBCG32	906	EST01906	M85392	HFBC36	906	EST01906	M85392	HFBC36
95	EST00737	W78589	HFBCF03	841	EST00776	M78631	HFBCG33	907	EST01907	M85393	HFBC37	907	EST01907	M85393	HFBC37
96	EST00738	W78590	HFBCF07	842	EST01563	M77979	HFBCG34	908	EST01908	M85394	HFBC38	908	EST01908	M85394	HFBC38
97	EST00739	W78591	HFBCF09	843	EST01564	M77980	HFBCG35	909	EST01909	M85395	HFBC39	909	EST01909	M85395	HFBC39
98	EST00740	W78592	HFBCF10	844	EST01565	M77981	HFBCG36	910	EST01910	M85396	HFBC40	910	EST01910	M85396	HFBC40
99	EST00741	W78593	HFBCF11	845	EST00777	M78632	HFBCG37	911	EST01911	M85397	HFBC41	911	EST01911	M85397	HFBC41
100	EST01549	W77966	HFBCF13	846	EST00778	M78633	HFBCG38	912	EST01912	M85398	HFBC42	912	EST01912	M85398	HFBC42
101	EST01550	W77967	HFBCF14	847	EST00779	M78634	HFBCG39	913	EST01913	M85399	HFBC43	913	EST01913	M85399	HFBC43
102	EST01551	W77968	HFBCF16	848	EST01566	M77982	HFBCG40	914	EST01914	M85400	HFBC44	914	EST01914	M85400	HFBC44
103	EST01552	M85338	HFBCF23	849	EST01567	M77983	HFBCG41	915	EST01915	M85401	HFBC45	915	EST01915	M85401	HFBC45
104	EST01852	M85338	HFBCF41	850	EST00780	M78633	HFBCG42	916	EST01916	M85402	HFBC46	916	EST01916	M85402	HFBC46
105	EST01553	M77969	HFBCF42	851	EST00781	M78634	HFBCG43	917	EST01917	M85403	HFBC47	917	EST01917	M85403	HFBC47
106	EST00742	M78594	HFBCF43	852	EST00782	M78635	HFBCG44	918	EST01918	M85404	HFBC48	918	EST01918	M85404	HFBC48
107	EST00743	M78595	HFBCF44	853	EST00783	M78636	HFBCG45	919	EST01919	M85405	HFBC49	919	EST01919	M85405	HFBC49
108	EST00744	M78596	HFBCF45	854	EST00784	M78637	HFBCG46	920	EST01920	M85406	HFBC50	920	EST01920	M85406	HFBC50
109	EST00745	M78597	HFBCF46	855	EST00785	M78638	HFBCG47	921	EST01921	M85407	HFBC51	921	EST01921	M85407	HFBC51
110	EST01554	M77970	HFBCF47	856	EST01568	M77984	HFBCG48	922	EST01922	M85408	HFBC52	922	EST01922	M85408	HFBC52
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112	EST00747	M78599	HFBCF49	858	EST01870	M85355	HFBCG50	924	EST01924	M85410	HFBC54	924	EST01924	M85410	HFBC54
113	EST00748	M78600	HFBCF50	859	EST01871	M85356	HFBCG51	925	EST01925	M85411	HFBC55	925	EST01925	M85411	HFBC55
114	EST01555	M77971	HFBCF51	860	EST00786	M78639	HFBCG52	926	EST01926	M85412	HFBC56	926	EST01926	M85412	HFBC56
115	EST00749	M78601	HFBCF52	861	EST01872	M85357	HFBCG53	927	EST01927	M85413	HFBC57	927	EST01927	M85413	HFBC57
116	EST00750	M78602	HFBCF53	862	EST01873	M85358	HFBCG54	928	EST01928	M85414	HFBC58	928	EST01928	M85414	HFBC58
117	EST00751	M78603	HFBCF54	863	EST01874	M85359	HFBCG55	929	EST01929	M85415	HFBC59	929	EST01929	M85415	HFBC59
118	EST01853	M85339	HFBCF56	864	EST00787	M78640	HFBCG56	930	EST01930	M85416	HFBC60	930	EST01930	M85416	HFBC60
119	EST00752	M78604	HFBCF57	865	EST01569	M77985	HFBCG57	931	EST01931	M85417	HFBC61	931	EST01931	M85417	HFBC61
120	EST00753	M78605	HFBCF58	866	EST01874	M85360	HFBCG58	932	EST01932	M85418	HFBC62	932	EST01932	M85418	HFBC62
121	EST00754	M78606	HFBCF59	867	EST01875	M85361	HFBCG59	933	EST01933	M85419	HFBC63	933	EST01933	M85419	HFBC63
122	EST00755	M78607	HFBCF60	868	EST01876	M85362	HFBCG60	934	EST01934	M85420	HFBC64	934	EST01934	M85420	HFBC64
123	EST00756	M78608	HFBCF61	869	EST00788	M78641	HFBCG61	935	EST01935	M85421	HFBC65	935	EST01935	M85421	HFBC65
124	EST00757	M78609	HFBCF63	870	EST00789	M78642	HFBCG62	936	EST01936	M85422	HFBC66	936	EST01936	M85422	HFBC66
125	EST00758	M78610	HFBCF68	871	EST00790	M78643	HFBCG63	937	EST01937	M85423	HFBC67	937	EST01937	M85423	HFBC67
126	EST00759	M78611	HFBCF73	872	EST00791	M78644	HFBCG64	938	EST01938	M85424	HFBC68	938	EST01938	M85424	HFBC68
127	EST00760	M78612	HFBCF75	873	EST00792	M78645	HFBCG65	939	EST01939	M85425	HFBC69	939	EST01939	M85425	HFBC69
128	EST00761	M78613	HFBCF79	874	EST00793	M78646	HFBCG66	940	EST01940	M85426	HFBC70	940	EST01940	M85426	HFBC70
129	EST00762	M78614	HFBCF81	875	EST00794	M78647	HFBCG67	941	EST01941	M85427	HFBC71	941	EST01941	M85427	HFBC71
130	EST00763	M78615	HFBCF84	876	EST00795	M78648	HFBCG68	942	EST01942	M85428	HFBC72	942	EST01942	M85428	HFBC72
131	EST00764	M78616	HFBCF85	877	EST01877	M85363	HFBCG69	943	EST01943	M85429	HFBC73	943	EST01943	M85429	HFBC73
132	EST01854	M85340	HFBCF86	878	EST01878	M85364	HFBCG70	944	EST01944	M85430	HFBC74	944	EST01944	M85430	HFBC74
133	EST00765	M78617	HFBCF87	879	EST01879	M85365	HFBCG71	945	EST01945	M85431	HFBC75	945	EST01945	M85431	HFBC75
134	EST00766	M78618	HFBCF89	880	EST01880	M85366	HFBCG72	946	EST01946	M85432	HFBC76	946	EST01946	M85432	HFBC76
135	EST01855	M85341	HFBCF90	881	EST01881	M85367	HFBCG73	947	EST01947	M85433	HFBC77	947	EST01947	M85433	HFBC77
136	EST01856	M85342	HFBCF91	882	EST01882	M85368	HFBCG74	948	EST01948	M85434	HFBC78	948	EST01948	M85434	HFBC78
137	EST01857	M85343	HFBCF93	883	EST01883	M85369	HFBCG75	949	EST01949	M85435	HFBC79	949	EST01949	M85435	HFBC79
138	EST01858	M85344	HFBCF94	884	EST01884	M85370	HFBCG76	950	EST01950	M85436	HFBC80	950	EST01950	M85436	HFBC80

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SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
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944	EST01949	M85433	HFBC113	1010	EST02024	M85508	HFBCJ18
945	EST01950	M85434	HFBC114	1011	EST02025	M85509	HFBCJ20
946	EST01951	M85435	HFBC115	1012	EST02026	M85510	HFBCJ21
947	EST01952	M85436	HFBC116	1013	EST02027	M85511	HFBCJ22
948	EST01953	M85437	HFBC117	1014	EST02028	M85512	HFBCJ23
949	EST01954	M85438	HFBC118	1015	EST02029	M85513	HFBCJ24
950	EST01955	M85439	HFBC119	1016	EST02030	M85514	HFBCJ25
951	EST01956	M85440	HFBC120	1017	EST02031	M85515	HFBCJ26
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954	EST01959	M85443	HFBC123	1020	EST02034	M85518	HFBCJ29
955	EST01960	M85444	HFBC124	1021	EST02035	M85519	HFBCJ30
956	EST01961	M85445	HFBC125	1022	EST02036	M85520	HFBCJ31
957	EST01962	M85446	HFBC126	1023	EST02037	M85521	HFBCJ32
958	EST01963	M85447	HFBC127	1024	EST02038	M85522	HFBCJ33
959	EST01964	M85448	HFBC128	1025	EST02039	M85523	HFBCJ34
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961	EST01966	M85450	HFBC130	1027	EST02041	M85525	HFBCJ36
962	EST01967	M85451	HFBC131	1028	EST02042	M85526	HFBCJ37
963	EST01968	M85452	HFBC132	1029	EST02043	M85527	HFBCJ38
964	EST01969	M85453	HFBC133	1030	EST02044	M85528	HFBCJ39
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967	EST01972	M85456	HFBC136	1033	EST02047	M85531	HFBCJ42
968	EST01973	M85457	HFBC137	1034	EST02048	M85532	HFBCJ43
969	EST01974	M85458	HFBC138	1035	EST02049	M85533	HFBCJ44
970	EST01975	M85459	HFBC139	1036	EST02050	M85534	HFBCJ45
971	EST01976	M85460	HFBC140	1037	EST02051	M85535	HFBCJ46
972	EST01977	M85461	HFBC141	1038	EST02052	M85536	HFBCJ47
973	EST01978	M85462	HFBC142	1039	EST02053	M85537	HFBCJ48
974	EST01979	M85463	HFBC143	1040	EST02054	M85538	HFBCJ49
975	EST01980	M85464	HFBC144	1041	EST02055	M85539	HFBCJ50
976	EST01981	M85465	HFBC145	1042	EST02056	M85540	HFBCJ51
977	EST01982	M85466	HFBC146	1043	EST02057	M85541	HFBCJ52
978	EST01983	M85467	HFBC147	1044	EST02058	M85542	HFBCJ53
979	EST01984	M85468	HFBC148	1045	EST02059	M85543	HFBCJ54
980	EST01985	M85469	HFBC149	1046	EST02060	M85544	HFBCJ55
981	EST01986	M85470	HFBC150	1047	EST02061	M85545	HFBCJ56
982	EST01987	M85471	HFBC151	1048	EST02062	M85546	HFBCJ57
983	EST01988	M85472	HFBC152	1049	EST02063	M85547	HFBCJ58
984	EST01989	M85473	HFBC153	1050	EST02064	M85548	HFBCJ59
985	EST01990	M85474	HFBC154	1051	EST02065	M85549	HFBCJ60
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987	EST01992	M85476	HFBC156	1053	EST02067	M85551	HFBCJ62
988	EST01993	M85477	HFBC157	1054	EST02068	M85552	HFBCJ63
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991	EST01996	M85480	HFBC160	1057	EST02071	M85555	HFBCJ66
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993	EST01998	M85482	HFBC162	1059	EST02073	M85557	HFBCJ68
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996	EST02001	M85485	HFBC165	1062	EST02076	M85560	HFBCJ71
997	EST02002	M85486	HFBC166	1063	EST02077	M85561	HFBCJ72
998	EST02003	M85487	HFBC167	1064	EST02078	M85562	HFBCJ73
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	EST02013	M85497	HFBC177		EST02088	M85572	HFBCJ83
	EST02014	M85498	HFBC178		EST02089	M85573	HFBCJ84
	EST02015	M85499	HFBC179		EST02090	M85574	HFBCJ85
	EST02016	M85500	HFBC180		EST02091	M85575	HFBCJ86
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1133	EST02153	M85636	HFBC120	1199	EST02224	M85706	HFBCN32	1254	EST02283	M85762	HFBCN29
1134	EST02154	M85637	HFBC122	1200	EST02226	M85707	HFBCN34	1255	EST02284	M85763	HFBCN31
1135	EST02155	M85638	HFBC123	1201	EST02228	M85709	HFBCN37	1256	EST02285	M85764	HFBCN36
1136	EST02156	M85639	HFBC124	1202	EST02229	M85710	HFBCN38	1257	EST02286	M85765	HFBCN37
1137	EST02157	M85640	HFBC125	1203	EST02230	M85711	HFBCN39	1258	EST02287	M85766	HFBCN39
1138	EST02159	M85642	HFBC128	1204	EST02232	M85713	HFBCN42	1259	EST02288	M85767	HFBCN40
1139	EST02161	M85644	HFBC130	1205	EST02233	M85714	HFBCN43	1260	EST02289	M85768	HFBCN42
1140	EST02162	M85645	HFBC131	1206	EST02234	M85715	HFBCN44	1261	EST02290	M85769	HFBCN46
1141	EST02163	M85646	HFBC132	1207	EST02235	M85716	HFBCN45	1262	EST02291	M85770	HFBCN47
1142	EST02164	M85647	HFBC134	1208	EST02236	M85717	HFBCN46	1263	EST02292	M85771	HFBCN48
1143	EST02165	M85648	HFBC135	1209	EST02237	M85718	HFBCN47	1264	EST02293	M85772	HFBCN48
1144	EST02166	M85649	HFBC136	1210	EST02238	M85719	HFBCN48	1265	EST02294	M85773	HFBCN50
1145	EST02167	M85650	HFBC138	1211	EST02239	M85720	HFBCN49	1266	EST02295	M85774	HFBCN51
1146	EST02168	M85651	HFBC139	1212	EST02240	M85721	HFBCN50	1267	EST02296	M85775	HFBCN52
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1148	EST02170	M85653	HFBC146	1214	EST02242	M85723	HFBCN54	1269	EST02298	M85777	HFBCN55
1149	EST02171	M85654	HFBC147	1215	EST02244	M85725	HFBCN60	1270	EST02299	M85778	HFBCN56
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1151	EST02173	M85656	HFBC150	1217	EST02246	M85727	HFBCN64	1272	EST02301	M85780	HFBCN58
1152	EST02174	M85657	HFBC151	1218	EST02247	M85728	HFBCN67	1273	EST02302	M85781	HFBCN59
1153	EST02175	M85658	HFBC154	1219	EST02248	M85729	HFBCN70	1274	EST02303	M85782	HFBCN60
1154	EST02176	M85659	HFBC154	1220	EST02249	M85730	HFBCN72	1275	EST02304	M85783	HFBCN62
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1156	EST02178	M85661	HFBC159	1222	EST02251	M85732	HFBCN74	1277	EST02306	M85785	HFBCN65
1157	EST02180	M85662	HFBC164	1223	EST02252	M85733	HFBCN75	1278	EST02307	M85786	HFBCN65
1158	EST02181	M85663	HFBC168	1224	EST02253	M85734	HFBCN76	1279	EST02308	M85787	HFBCN66
1159	EST02182	M85664	HFBC171	1225	EST02254	M85735	HFBCN77	1280	EST02309	M85788	HFBCN67
1160	EST02183	M85665	HFBC172	1226	EST02255	M85736	HFBCN78	1281	EST02310	M85789	HFBCN69
1161	EST02184	M85666	HFBC172	1227	EST02256	M85737	HFBCN79	1282	EST02311	M85790	HFBCN71
1162	EST02185	M85667	HFBC173	1228	EST02257	M85738	HFBCN80	1283	EST02312	M85791	HFBCN71
1163	EST02187	M85669	HFBC177	1229	EST02258	M85739	HFBCN81	1284	EST02313	M85792	HFBCN77
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1165	EST02189	M85671	HFBC182	1231	EST02260	M85741	HFBCN83	1286	EST02315	M85795	HFBCN82
1166	EST02190	M85672	HFBC184	1232	EST02261	M85742	HFBCN84	1287	EST02316	M85796	HFBCN83
1167	EST02191	M85673	HFBC186	1233	EST02262	M85743	HFBCN86	1288	EST02317	M85797	HFBCN84
1168	EST02193	M85675	HFBC187	1234	EST02263	M85744	HFBCN87	1289	EST02318	M85798	HFBCN85
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1170	EST02195	M85677	HFBC188	1236	EST02265	M85746	HFBCN89	1291	EST02320	M85800	HFBCN88
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1173	EST02198	M85680	HFBC194	1239	EST02268	M85749	HFBCN93	1294	EST02323	M85803	HFBCN91
1174	EST02199	M85681	HFBC195	1240	EST02269	M85750	HFBCN96	1295	EST02324	M85804	HFBCN92
1175	EST02200	M85682	HFBC196	1241	EST02270	M85751	HFBCN11	1296	EST02325	M85805	HFBCN93
1176	EST02201	M85683	HFBCN01	1242	EST02271	M85752	HFBCN15	1297	EST02326	M85806	HFBCN94
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1193	EST02218	M85700	HFBCN25								
1194	EST02219	M85701	HFBCN27								
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SUBSTITUTE SHEET

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SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
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1316	EST02346	M85823	HFBC039	1382	EST02414	M85890	HFBCP23	1448	EST02484	M85960	HFBC007	1493	EST02531	M86006	HFBC007
1317	EST02347	M85312	HFBC039	1383	EST02415	M85891	HFBCP24	1449	EST02485	M85961	HFBC007	1494	EST02532	M86007	HFBC007
1318	EST02348	M85824	HFBC041	1384	EST02416	M85892	HFBCP25	1450	EST02486	M85962	HFBC007	1495	EST02533	M86008	HFBC007
1319	EST02349	M85825	HFBC042	1385	EST02417	M85893	HFBCP26	1451	EST02487	M85963	HFBC007	1496	EST02534	M86009	HFBC007
1320	EST02350	M85826	HFBC043	1386	EST02418	M85894	HFBCP27	1452	EST02488	M85964	HFBC007	1497	EST02535	M86010	HFBC007
1321	EST02351	M85827	HFBC044	1387	EST02419	M85895	HFBCP28	1453	EST02489	M85965	HFBC007	1498	EST02536	M86011	HFBC007
1322	EST02352	M85828	HFBC045	1388	EST02421	M85897	HFBCP29	1454	EST02490	M85966	HFBC007	1499	EST02537	M86012	HFBC007
1323	EST02353	M85829	HFBC046	1389	EST02422	M85898	HFBCP30	1455	EST02491	M85967	HFBC007	1500	EST02538	M86013	HFBC007
1324	EST02354	M85830	HFBC047	1390	EST02423	M85899	HFBCP31	1456	EST02492	M85968	HFBC007	1501	EST02539	M86015	HFBC007
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1326	EST02356	M85832	HFBC049	1392	EST02425	M85901	HFBCP33	1458	EST02494	M85970	HFBC007	1503	EST02541	M86015	HFBC007
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1328	EST02358	M85834	HFBC051	1394	EST02427	M85903	HFBCP35	1460	EST02496	M85972	HFBC007	1505	EST02543	M86015	HFBC007
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1330	EST02360	M85836	HFBC053	1396	EST02429	M85905	HFBCP37	1462	EST02498	M85974	HFBC007	1507	EST02545	M86015	HFBC007
1331	EST02361	M85837	HFBC054	1397	EST02430	M85906	HFBCP38	1463	EST02499	M85975	HFBC007	1508	EST02546	M86015	HFBC007
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1386	EST02416	M85892	HFBC109	1452	EST02485	M85961	HFBCP93	1518	EST02554	M86015	HFBC007	1563	EST02601	M86015	HFBC007
1387	EST02417	M85893	HFBC110	1453	EST02486	M85962	HFBCP94	1519	EST02555	M86015	HFBC007	1564	EST02602	M86015	HFBC007

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1504	EST02542	M86017	HFBCY30	1570	EST02613	M86088	HFBDJ17	1636	EST02683	M85317	HHCF47	1692	EST01578	M77993	HHCMC40
1505	EST02543	M86018	HFBCY31	1571	EST02614	M86089	HFBDJ19	1637	EST02684	M85318	HHCF48	1693	EST01579	M77994	HHCMC41
1506	EST02544	M86019	HFBCY32	1572	EST02615	M86090	HFBDJ20	1638	EST02685	M85319	HHCF49	1694	EST01580	M77995	HHCMC42
1507	EST02545	M86020	HFBCY33	1573	EST02616	M86091	HFBDJ21	1639	EST02686	M85320	HHCF50	1695	EST01581	M77996	HHCMC43
1508	EST02546	M86021	HFBCY34	1574	EST02617	M86092	HFBDJ22	1640	EST02687	M85321	HHCF51	1696	EST01582	M77997	HHCMC44
1509	EST02547	M86022	HFBCY35	1575	EST02618	M86093	HFBDJ23	1641	EST02688	M85322	HHCF52	1697	EST01583	M77998	HHCMC45
1510	EST02548	M86023	HFBCY36	1576	EST02619	M86094	HFBDJ24	1642	EST02689	M85323	HHCF53	1698	EST01584	M77999	HHCMC46
1511	EST02549	M86024	HFBCY37	1577	EST02620	M86095	HFBDJ25	1643	EST02690	M85324	HHCF54	1699	EST01585	M78000	HHCMC47
1512	EST02550	M86025	HFBCY38	1578	EST02621	M86096	HFBDJ26	1644	EST02691	M85325	HHCF55	1700	EST01586	M78001	HHCMC48
1513	EST02551	M86026	HFBCY39	1579	EST02622	M86097	HFBDJ27	1645	EST02692	M85326	HHCF56	1701	EST01587	M78002	HHCMC49
1514	EST02552	M86027	HFBCY40	1580	EST02623	M86098	HFBDJ28	1646	EST02693	M85327	HHCF57	1702	EST01588	M78003	HHCMC50
1515	EST02553	M86028	HFBCY41	1581	EST02624	M86099	HFBDJ29	1647	EST02694	M85328	HHCF58	1703	EST01589	M78004	HHCMC51
1516	EST02554	M86029	HFBCY42	1582	EST02625	M86100	HFBDJ30	1648	EST02695	M85329	HHCF59	1704	EST01590	M78005	HHCMC52
1517	EST02555	M86030	HFBCY43	1583	EST02626	M86101	HFBDJ31	1649	EST02696	M85330	HHCF60	1705	EST01591	M78006	HHCMC53
1518	EST02556	M86031	HFBCY44	1584	EST02627	M86102	HFBDJ32	1650	EST02697	M85331	HHCF61	1706	EST01592	M78007	HHCMC54
1519	EST02557	M86032	HFBCY45	1585	EST02628	M86103	HFBDJ33	1651	EST02698	M85332	HHCF62	1707	EST01593	M78008	HHCMC55
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1527	EST02565	M86040	HFBCY53	1593	EST02636	M86111	HFBDJ41	1659	EST02706	M85340	HHCF70	1715	EST01601	M78016	HHCMC63
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1539	EST02577	M86052	HFBCY65	1605	EST02648	M86123	HFBDJ53	1671	EST02718	M85352	HHCF82	1727	EST01613	M78028	HHCMC75
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1565	EST02603	M86078	HFBCY91	1631	EST02674	M86149	HFBDJ79	1697	EST02744	M85378	HHCF08	1753	EST01639	M78054	HHCMC01
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1576	EST02614	M86089	HFBCY02	1642	EST02685	M86160	HFBDJ90	1708	EST02755	M85389	HHCF19	1764	EST01650	M78065	HHCMC12
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1695	EST100850	W78702	HHCNC52	1827	EST101618	W78809	HHCNC24	1761	EST101598	W78756	HHCNC24
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1697	EST100852	W78704	HHCNC54	1829	EST100958	W78811	HHCNC26	1763	EST100905	W78758	HHCNC26
1698	EST102685	W78705	HHCNC55	1830	EST100959	W78812	HHCNC27	1764	EST102690	W78759	HHCNC27
1699	EST102686	W78706	HHCNC56	1831	EST101619	W78813	HHCNC28	1765	EST101600	W78760	HHCNC28
1700	EST101579	W77994	HHCNC60	1832	EST100960	W78814	HHCNC29	1766	EST100906	W78761	HHCNC29
1701	EST100853	W78707	HHCNC63	1833	EST100961	W78815	HHCNC30	1767	EST100907	W78762	HHCNC30
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1703	EST100855	W78709	HHCNC78	1835	EST101620	W78817	HHCNC32	1769	EST100909	W78764	HHCNC32
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1705	EST100856	W78710	HHCNC85	1837	EST100963	W78819	HHCNC34	1771	EST101601	W78766	HHCNC34
1706	EST100857	W78711	HHCNC87	1838	EST100964	W78820	HHCNC35	1772	EST101602	W78767	HHCNC35
1707	EST100858	W78712	HHCNC88	1839	EST100965	W78821	HHCNC36	1773	EST100911	W78768	HHCNC36
1708	EST100859	W78713	HHCNC89	1840	EST100966	W78822	HHCNC37	1774	EST100912	W78769	HHCNC37
1709	EST100860	W78714	HHCNC90	1841	EST100967	W78823	HHCNC38	1775	EST100913	W78770	HHCNC38
1710	EST100861	W78715	HHCNC91	1842	EST100968	W78824	HHCNC39	1776	EST101603	W78771	HHCNC39
1711	EST100862	W78716	HHCNC92	1843	EST100969	W78825	HHCNC40	1777	EST100914	W78772	HHCNC40
1712	EST100863	W78717	HHCNC93	1844	EST100970	W78826	HHCNC41	1778	EST100915	W78773	HHCNC41
1713	EST100864	W78718	HHCNC94	1845	EST100971	W78827	HHCNC42	1779	EST100916	W78774	HHCNC42
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1721	EST100872	W78726	HHCNC02	1853	EST100978	W78835	HHCNC50	1787	EST100924	W78782	HHCNC50
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1732	EST100883	W78737	HHCNC13	1864	EST100988	W78846	HHCNC61	1798	EST100935	W78793	HHCNC61
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1746	EST100897	W78751	HHCNC27	1878	EST100993	W78860	HHCNC75	1812	EST100949	W78807	HHCNC75
1747	EST100898	W78752	HHCNC28	1879	EST100994	W78861	HHCNC76	1813	EST100950	W78808	HHCNC76
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1883	EST01001	W78853	HHCNH54	1949	EST01054	W78906	HHCPC08	2015	EST01109	M78961	HCPE83
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1886	EST01003	W78855	HHCNH59	1952	EST01057	W78909	HHCPC11	2018	EST01112	M78964	HCPE94
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1889	EST01006	W78858	HHCNH74	1955	EST01060	W78912	HHCPC18	2021	EST01115	M78967	HCPE04
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1891	EST01008	W78860	HHCNH77	1957	EST01062	W78914	HHCPC37	2023	EST01117	M78969	HCPE12
1892	EST01009	W78861	HHCNH77	1958	EST01063	W78915	HHCPC37	2024	EST01118	M78970	HCPE16
1893	EST01010	W78862	HHCNH81	1959	EST01064	W78916	HHCPC40	2025	EST01119	M78971	HCPE24
1894	EST01011	W78863	HHCNH89	1960	EST01065	W78917	HHCPC42	2026	EST01120	M78972	HCPE29
1895	EST01012	W78864	HHCNH91	1961	EST01066	W78918	HHCPC44	2027	EST01121	M78973	HCPE33
1896	EST01013	W78865	HHCNH91	1962	EST01067	W78919	HHCPC45	2028	EST01122	M78974	HCPE43
1897	EST01014	W78866	HHCNH91	1963	EST01068	W78920	HHCPC49	2029	EST01123	M78975	HCPE44
1898	EST01015	W78867	HHCNH91	1964	EST01069	W78921	HHCPC52	2030	EST01124	M78976	HCPE50
1899	EST01016	W78868	HHCNH91	1965	EST01070	W78922	HHCPC52	2031	EST01125	M78977	HCPE52
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1901	EST01018	W78870	HHCNH91	1967	EST01072	W78924	HHCPC55	2033	EST01127	M78979	HCPE61
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2293	EST01338	HCPN94	79190	EST01421	HCPN44	79239	EST01422	HCPN44	79239
2294	EST01339	HCPN95	79191	EST01423	HCPN45	79240	EST01424	HCPN45	79240
2295	EST01340	HCPN96	79192	EST01425	HCPN46	79241	EST01426	HCPN46	79241
2296	EST01341	HCPN97	79193	EST01427	HCPN47	79242	EST01428	HCPN47	79242
2297	EST01342	HCPN98	79194	EST01429	HCPN48	79243	EST01430	HCPN48	79243
2298	EST01343	HCPN99	79195	EST01431	HCPN49	79244	EST01432	HCPN49	79244
2299	EST01344	HCPN00	79196	EST01433	HCPN50	79245	EST01434	HCPN50	79245
2300	EST01345	HCPN01	79197	EST01435	HCPN51	79246	EST01436	HCPN51	79246
2301	EST01346	HCPN02	79198	EST01437	HCPN52	79247	EST01438	HCPN52	79247
2302	EST01347	HCPN03	79199	EST01439	HCPN53	79248	EST01440	HCPN53	79248
2303	EST01348	HCPN04	79200	EST01441	HCPN54	79249	EST01442	HCPN54	79249
2304	EST01349	HCPN05	79201	EST01443	HCPN55	79250	EST01444	HCPN55	79250
2305	EST01350	HCPN06	79202	EST01445	HCPN56	79251	EST01446	HCPN56	79251
2306	EST01351	HCPN07	79203	EST01447	HCPN57	79252	EST01448	HCPN57	79252
2307	EST01352	HCPN08	79204	EST01449	HCPN58	79253	EST01450	HCPN58	79253
2308	EST01353	HCPN09	79205	EST01451	HCPN59	79254	EST01452	HCPN59	79254
2309	EST01354	HCPN10	79206	EST01453	HCPN60	79255	EST01454	HCPN60	79255
2310	EST01355	HCPN11	79207	EST01455	HCPN61	79256	EST01456	HCPN61	79256
2311	EST01356	HCPN12	79208	EST01457	HCPN62	79257	EST01458	HCPN62	79257
2312	EST01357	HCPN13	79209	EST01459	HCPN63	79258	EST01460	HCPN63	79258
2313	EST01358	HCPN14	79210	EST01461	HCPN64	79259	EST01462	HCPN64	79259
2314	EST01359	HCPN15	79211	EST01463	HCPN65	79260	EST01464	HCPN65	79260
2315	EST01360	HCPN16	79212	EST01465	HCPN66	79261	EST01466	HCPN66	79261
2316	EST01361	HCPN17	79213	EST01467	HCPN67	79262	EST01468	HCPN67	79262
2317	EST01362	HCPN18	79214	EST01469	HCPN68	79263	EST01470	HCPN68	79263
2318	EST01363	HCPN19	79215	EST01471	HCPN69	79264	EST01472	HCPN69	79264
2319	EST01364	HCPN20	79216	EST01473	HCPN70	79265	EST01474	HCPN70	79265
2320	EST01365	HCPN21	79217	EST01475	HCPN71	79266	EST01476	HCPN71	79266
2321	EST01366	HCPN22	79218	EST01477	HCPN72	79267	EST01478	HCPN72	79267
2322	EST01367	HCPN23	79219	EST01479	HCPN73	79268	EST01480	HCPN73	79268
2323	EST01368	HCPN24	79220	EST01481	HCPN74	79269	EST01482	HCPN74	79269
2324	EST01369	HCPN25	79221	EST01483	HCPN75	79270	EST01484	HCPN75	79270
2325	EST01370	HCPN26	79222	EST01485	HCPN76	79271	EST01486	HCPN76	79271

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NOTE REGARDING SEQUENCE LISTINGS: The listings of SEQ ID NOS: 1-2421 are in numerical order. However, an occasional number (for example, SEQ ID NO: 44) is not found in this list. In all, 9 SEQ ID NOS are not used. Nevertheless, the convention "1-2421" is used, for example, to refer to all the SEQ ID NOS in the following list, while "1-315" is used, for example, to refer to all the listed sequences falling between SEQ ID NO 1 and SEQ ID NO 315.

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## SEQUENCE LISTING

## (1) GENERAL INFORMATION:

- (i) APPLICANT: Venter, J. Craig  
Adams, Mark D.  
Moreno, Ruben F.
- (ii) TITLE OF INVENTION: Sequences Characteristic of Human Gene  
Transcription Product
- (iii) NUMBER OF SEQUENCES: 2412 (1-2421, with 9 SEQ ID NOS unused.)
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: Knobbe, Martens, Olson, and Bear
  - (B) STREET: 620 Newport Center Dr. Sixteenth Floor
  - (C) CITY: Newport Beach
  - (D) STATE: CA
  - (E) COUNTRY: USA
  - (F) ZIP: 92660
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy disk
  - (B) COMPUTER: IBM PC compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: 07/837,195
  - (B) FILING DATE: 12-FEB-1992
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: US 07/716,831
  - (B) FILING DATE: 20-JUN-1991
- (viii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Israelsen, Ned A.
  - (B) REGISTRATION NUMBER: 29,655
  - (C) REFERENCE/DOCKET NUMBER: NIH004.004CP1
- (ix) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: 619-235-8550
  - (B) TELEFAX: 619-235-0176

SEQ ID NO:1: (Length of Sequence = 362 Nucleotides)

CTCCCTTTT GTTCCCTCA GTGTCCTTT TAATGCTTC CCTCAITTT CCTAGCAGC ATCCTAGTTG ATGGTCTGGG  
TTATCAGAGG AGCAAAACA TTAAAGTGT AAATAATGCT CATGTCTCC CTGGGATTTC TAAACAGAAA AAATGAAGAA

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AGAGGCAGAG AAGAGCTTCA CAAGGTGTGT GCCAGCTCTG CATCATTTCC AGCTGCTCAA CCACCATTTC TCCCATTTTA  
GGTCCCCAAA AGTAGGAGGT GGGGCTCAC AGAGCTGCTG TGGGCTTTGG GTATCAAAAG CTGCAGCCAC CATATGGGGC  
ACTCCTGGCT GGTGTACAGG GTGGGCATTG CCCAGGTCTT TT

SEQ ID NO:2: (Length of Sequence = 214 Nucleotides)

GTITINCTTT TTTCTTAGCT TCATTTCTCT TAAAAACAA GGAACAAGAA AACATTGCAC CAGCGTTCTA AGCCTCAAAC  
AAAANACAAA ACAAATCCCC CTGCGAAGAA CAATAAACTT TACATCTCTT TGGCAACAAT AACTTAAAAT CACCCAACCT  
CCATTGCTC CAACCACAGC AGTTAGTTAG TTACAAAAAT ATTCCNTGTG CTGC

SEQ ID NO:3: (Length of Sequence = 344 Nucleotides)

ATTAAATAGGA AAGATGATTG TATAGATGGT GGGCTATTAA CTCAGATCAG GATGAGAATC GGGAGTGCCT TTACATGTGT  
GGTACCCAAA TGGGTGGTGT GATATAAGAG TAACAAAAGG ACTGAAAGGG TTAAAAAGA AAGAAAAAAA AAAAATCCCC  
TGGTTGGGAG GGTGTTAAGT ATCGAGTGT TTTCCAAACC ATTCTCTCTC TGCTCACCTA CCCCTAGGTG ATTAAAGGAG  
ATAACTTTTA AAAAAGAAAG AATTGGCTCA AAGGTACTGT AAATTCTAGG ATTATATACC TTTATATAGG TTCATTCCCT  
GATCCCTGTA TTATCAAGGC ACAG

SEQ ID NO:4: (Length of Sequence = 352 Nucleotides)

GACCCGGTAA COGAGGCGC AAGGAGGCCA GGTAGTCCCG GCACCTCTCA CTCTGCAGAG ACCAGCGGCT TCGTGGGAGG  
CCTGTGGGTC ACACGTAGGG GCTAGAGCCA GCCTGCATCC TGCCACCGG GCTCCACTTG GAGATCAGCA GGAGGGCCAG  
TGTTGGACCC CTGCTGCCAC CTCTCTGGG CCTGTCTCCT TCTGGAAAT TAAGAAGGTG TGCTCCAGAG CCAAGAGGAG  
CAATAAGAAA CCTCGTGTGC CAGCTTCTTA AGGGTKGCAG TGCAAGACCC CA

SEQ ID NO:5: (Length of Sequence = 562 Nucleotides)

ATACCTTAC ATATATATTC ACAGAAAATC ATATTGCATA TACTCTTCT CCACATCATA AAAATGGGTG TTGGGCTCTC  
TAGGACACAA GGAAGCAGG CCAATTTCT CATATTTTCA GGAATAAAT GAGTGCCCG AAGGTGTAAT AGGAACCTTT  
TACTAACCTC ATCTGACTTC ATCCTCACAC CAGCATTTTG TGTTAAGGA AACTGGCCGA GAGTGGTTAA GAAATATATC  
CAAAGACGTA TAGTTCCAAA TGGAACACGG ATCTTTTAT TTAAATTCCA ATCATCTTTC CATTATATCA GCCAATGATG  
GAGCAGAAAG CTGGTCCAGG CAATCCAGA ATAGATCTTT CTAGGCACCC GTTCAGTGTG AGGAGGGGGA AGTGGCCTTG  
CCAAGGGGCC AGTGAGCTCA ATTAGGGTTA ACGCTGCTTC TTAGCCTACC CCAGGGGNC ACGCACITAG GTTGTTTTGT  
GCCAGCTTT GGCAGGAAGC ATTCTCTCT TCAAAGATTN NAGCCTTGC GTCATATATC GGGTGTAAATA GGGTCTTTT  
TT

SEQ ID NO:6: (Length of Sequence = 359 Nucleotides)

ACATGTTCTC CCTCTTTCAA TTTTAGCAGT AATGTGATCC TCAAAAATGC ATTAATACTA GTTGAAGTAA ATAAACGGAA  
GAGCTCCAAA ATGCTGCAT TAAATGCAIT TTCCACACT AATGCCAATC ATCCAAAGCT ATTTTCAACA AGTCAGGTAT  
TCAAAGCTAT TCACACCACT TGAAAGAGTA ATTACCATTT ACTGAAGCAC TTATCTGTCC TACTGTATG GGAGTAAATG  
CTTCTCATAG GTTATCTCAT GTACATTATG CCACTTINAC TTAAAATGAT CACAATTNAG TGCTATAGGT TTTTGGGTTA  
ATGTTTTCCC NGGGGGAGTT GTTAAAAACA TGGCATTTT

SEQ ID NO:7: (Length of Sequence = 218 Nucleotides)

113

AAC TTGCAAC ATAAATACTA GAAAAAGAGA AAATATCATC AAAATACAAA TAACTGTTAG AAATCATGTC TCAAAAGAAR  
 AACCTGGCAA TGCATGATTA CGAAATGCAA AAGAMGATAC AGTTGCTCTC TGTATATGCG CTTTCCACAT CCACAGATTG  
 AAACAAC TGT GGATAAAAAA GGATTTTTC A TGCCATTAA ACAVCAATGC AACAGTAA

SEQ ID NO:8: (Length of Sequence = 345 Nucleotides)

CTACAATAGA AGGCAAAC TA TGCCCTCCT TTGCTCAGAA ACTTTTAATA TCTKCCTATT TCCCCATGTA AAAGCCAATC  
 CTCACCACA GTGTAGAAGG GCTATCCATT TCTAGCTACA CATCTCCTCA GTCAGTCCCC CCAGCCCCAG TACTTGGGGA  
 CTTTGCCCTT GCAGTCCCT GTGCCAGCAA ACTCTTCCTC CAGATGTCCA CATGACTCAC CCNCTCCTT CAGGGGTCTT  
 CTCAAATGTC ACTTTACCAG AGGTGGCTTC CCTGACCATC CTGTATAAAT AGCATCACCC TACCTCCTAT CTCTCTCTCT  
 AATGTCTCAG GAATTCGATA TCAAG

SEQ ID NO:9: (Length of Sequence = 189 Nucleotides)

GTGAACAGAC TAAGGCCTTT NIGGAGGCC AGAATAAGAT TACTGTGCCA TTTCTTGAGC AGTGTCCCAT CAGAGGTTTA  
 TACAAAGAGA GAATGACTGA ACTATATGAT TATCCANGT ATAGTTGCCA CTTCAAGAAA GGAGAACGGT GTTTTTATT  
 TTACAATACA GGNITTNAGA ACCACCGGG

SEQ ID NO:10: (Length of Sequence = 267 Nucleotides)

CTCCCTTCGC CACCTGCTGG ACGGAGGGG CTACTACGAT GCCATGGG TGCTGRTTTT TTATTTCTCA GACAGGACTG  
 CTCTGTATNT GTCTTGGAT TCTACGTAGA TTTATATTG TAAATATTA CATTGTTCAT GACCAGAAGA AATGTCAATTA  
 TCGTAAATTT TAGATTCTGG NGTCTATATA TGAAGNAAT ACTAACTACT AACTGTTATA ACAWCAAAAT GTGGGNTGTA  
 TATCTACARG CCGAGCCGA CTGTCA

SEQ ID NO:11: (Length of Sequence = 247 Nucleotides)

CTCATAAAGC CAGGGTGATA AAATGGTAG TTTTCATGTTA TCTACAAGRC TAAGKTCAA ATTCCATGCA TGTGCTGRTA  
 AAAGACCCAT NATGGKCTM ACTGTACTTA TCCCCATTT ATTAGCATTC ATTCGGTCA CCAGCTCTAG TTCCTCTGCT  
 TAGCGAATCT CGCTGTCTT CAAGATGTCA TTCAAATGTC ACATTTTGTG GGAAGCCTTG CCTTTTTTGA CACGGTCTCC  
 CTGCCAC

SEQ ID NO:12: (Length of Sequence = 280 Nucleotides)

AAGGCGAGAG GCTTCTGGAG AAACCCACCC CACCAACGTC TTGATCTTGG ACTTTTAVCC TCCAGAGCTA TGAGAAAACA  
 AVTTCTGTIV VATVGVGCC ACTCAGCCTG TGGATACTGG CAGCCCTAGC AACTCATAAC ACACATACAT TTTAACTCG  
 GTTTAATCCT GTGRCCATTC ACTTATGGTT CAGTTTTTAA ATAGTCTTAG TCTTATGVCC ACTGTTAAAG TTCACCAGGA  
 CATAGGSCAT TGGGGAAAGG GGCCTGTAACT TCTTGGATTA

SEQ ID NO:13: (Length of Sequence = 339 Nucleotides)

VCTVCTVCC AACTTCATTC AGATATTGAC TCTGGTGATG GGAACATTAA ATACATTCTC TCAGGGGAAG GAGCTGGAAC  
 CATTTTTVTR ATTGATGACA AATCAGGGAA CATTATGCC ACCAAGACGT TGGATCGAGA AGAGAGAGCC CAGTACACGT  
 TGATGGCTCA GCGGTGGAC AGGGACACCA ATCGGCCACT GGAGCCACCG TCGGAATTCA TTKTCAAGGK CCAGGACATT  
 AATGACAGTC CTCGGAGGT TTCTGACAG AGACCTATCA TGCCAACTGT GCCSTGTARA GGTCCAATKT TGGGTGSTGT  
 ACGGTAGTGG GGAGGCCTG

SEQ ID NO:14: (Length of Sequence = 342 Nucleotides)

114

GGGVGCAAAG TAGCAGATTC TAGTAAAGGA CCAGATGAGG CAAAAATTAA GGCACCTCTG GAAAGAACAG GCTACACACT  
TGATGTGACC ACTGGACAGA GGAAGTATGG AGGACCACCT CCAGATTCCG TTTATYCAGG TCAGCAGCCT TCTGTGGCA  
CTGAGATATT TGTGGGAAAG ATCCCAAGAG ATCTATTTTG AGGATGAACT TGTTCATTA TTTGAGAAAG CTTGGACCTA  
TATGGGATCC TTCGTCTAAT GATGGATCCA CTCACTGGTC TCAATAGAGG TTAATGCGTT TGTCACTTTT TTGTACAAAA  
GGAGCARGCT CAAGGAGGGC TG

SEQ ID NO:15: (Length of Sequence = 354 Nucleotides)

ATGTTGATGC TGAAATTVAA GATCCACCAA TTCCAGAAAA ACCATGGAAG GTTCATGTGA AATGGATTTT GGACACTGAT  
ATTTTCAATG AATGGATGAA TGAGGAGGAT TATRAGGTGG ATGAAAATAG GAAGCCTGTR AGTTTYCGTC AGCGGATTTT  
AACCAAGAAT GAAGAGCCAG TCAGAAGTCC AGAAAGAAGA GATAGAAAAG CATCASCTAA TGCTCGAAAG AGGAAACATT  
CGCCTTCGCC TCCCCCTCCG ACACCAACAG AWTACGGGA AGAAGAGTGG GAAGAAAGGC CAAGCTAGCC TTTTATGGGG  
AAGCCGCAAG AAGTCCAGAA AGAGGGWWGG TTGA

SEQ ID NO:16: (Length of Sequence = 348 Nucleotides)

CAGGCAAGTT TCTTCCAGGA TGAGAAATCA GTGGAAAGTG AGGGCCAGCC AACAGCCACC ACCAACCACC CAACACGCGA  
GCGAGACCAT CTAAAAGAG CCCCAGCCAA GCTGACCATG GGTCTGACCC CAACTGAAG AAATGCCAG CCCAGCCAAA  
CCCAATTGC TAACTTGTAT TATAAGCAAG TACAATGGTC CTACCTTAA GCCACTAAGT TTTGGGATGC TTTGTTACAC  
AGCTATAGAT AAGCTGATAC AGGGAATGTC AGAWTCCATG ATGAGAGACC GAGCCTTTCA KTCGTGTCAGA GGYACCTTVG  
GTTGGCAAAA CTCAAAAAG AGGGACCT

SEQ ID NO:17: (Length of Sequence = 415 Nucleotides)

AGCAYGGGCT GGGGGGCGG GAGTTAGGCG TGGGGCTTGT TTTACGCTCT GCCCCCACA CCCCCTCTC TTCCGTCTG  
ATTAAGCCCA AGGGTTGGTG GACTTAACCT TCAGCCCATC TCTAAGGGTT TCACAGACTG GATCTTTCTA AACTTTATTG  
GGTACCTGCT TCCCCTTTTC CCTGGTAGTT TTCATCTACA AAAAGTCAA ACCTGATCGA AATAGAAATA AGATCATCAA  
ATTGGACCAT TCTCTAGCG TTCGAGTGT CCGGCCAGAC TGSCATTGAG TACACGCTGA GATCCAAACA CATCACACTG  
GCCTCAGGTC ACCAACTCGC CACTCAGGCG ACAAGGCCTG CCCTGTGTTT CACAAGGCTT TCCTTAATGT CGTCGGTGCC  
CAGGTGAACC ACAAG

SEQ ID NO:18: (Length of Sequence = 356 Nucleotides)

GTATGTATGT CTGTAGGTAT TTCTATACTT AACCATCTGT GTCCCAATTA AGCTAAACAT GATTCAATTCT GATGCCAACC  
CCCATCCATC ATGCCATGGA TCGCTCTAGA CTCTTCCTT TGTAACTCC CACTCAAACA GTGAGAAACC TTTGCCAGT  
ATGTTTGGGA GTAACTCAC TGGGAGTTTG CAGTCCACT AGATGAATGC CAACCCATTT GTTCATTTAA AAGGACTTTT  
GGAACCATAG AGCAATGGCT GGGCTGGGTC TVGCACGTTT ATCTTGACTG AAACAATTGG CCATGAAGGC ACTTGCCAAG  
GAAACTCTAG GGGCCACAAG GGTCTGGGT GCTTGC

SEQ ID NO:19: (Length of Sequence = 339 Nucleotides)

CATGCTTCCA TTTTTTTTAT TTTTAAACCA CCAAACCAAT ATTTTYCCTT TAAATTTTAA TCTTATAATA TAGAAATCTT  
ATGTAAATGA AATTTTGTCA TGTTCAAAT AAAGAGAACT GAAGTAGAAA ATAGAAATGC CAGTAAACAA CATAATGTTT  
AATTTACAAC TTACATTAGG GGTTTGGGGG VATGCTAATT ATATATTGAG AATATACATT AGAACTCTTC AAAATGGGCT  
CTTCTAATGA GGTCACTACT GAACATAATT GTTCCCTCTT CIGTTAAATA GAATAGGTTT AAATGACTAG TCCAAATGGA  
ATTATTGCCT TCTKGTAA



SEQ ID NO:20: (Length of Sequence = 437 Nucleotides)

AGAACAAGGG AACTCAGCAG CCCCTCCCTT CCATCAGCT GTTCCTGAGA GATGCAATAT AGTAGTCATC GACATCATCC  
TTATCAACAG CATCATCACT CAGACAGTGG TGAAAGTCTT TCTTCACAAG GAAAAACAAA GATAAAGAAA TACATGAGCA  
TTAATCAGAA ATTTTCAAAG CTGGGATTCT AATGATATGC ATTATCATTA GACATTCAAA TGCTATACAT CTTCTGATGA  
AGCCTCCTTG ACAGCAGCTA CACTTATTTT ACATTAGAAT GCCTAGAGAA ATCCTGACTG CCCAGCTTGG TCATGGGACC  
TTCCCCACTC TCCTCTTGGA GGAATGAAAA GATGTGGCGG CTTTCTACTT TTGCTACTGA GCTGGGGTAT ATGGCTAGGT  
CCACTTTCTA AGGGGCTTGG AAGGGTTATT CCATCTG

SEQ ID NO:21: (Length of Sequence = 385 Nucleotides)

GTTTGATTG CTTTTTTTTT AGAGTTTAC ATCAGTGTTT TTCAGGAATA TTGGTCTTTC ATTTTCTTTT CTGGGAATAT  
TTTCTAGTTT TACTTTGTCA GAGTAAATTC TGGCTTCACA GAATTATTTG TAGTCTCTCC TGCTCTGGTT TATTATGCT  
GCTATAACAA AATACCACAG ACAAGGTGGT AATAAATAAC ACAAATTTAT TTTTCCAGT TCTGGAGGCT AGGAGTTCAA  
GAAGCTGGCA AGTTCAATGT CTGGTGAGAC CCATTCCCTC ATAGGTGGCA CCATCTAGGG GTCTTACAT GRCAAAGAGA  
TGGAAGGGCC AAAAAGATGG TGACCTATTG TGAGGCTTTT TTAAAGGGC CTTVAATCC CAGTC

SEQ ID NO:22: (Length of Sequence = 374 Nucleotides)

ACCTTCATGG TCATGAAGGC CATGCAGTCT CTCAAGTCCC GAGGCTACGT GAAGGAACAG TTTGCCTGGA GACATTTCTA  
CTGGTACCTT ACCAATGAGG GTATCCAGTA TCTCCGIGAT TACCTTCATC TGCCCCCGGA GATTGTGCCT GCCACCCTAC  
GCCGTAGCCG TCCAGAGACT GGCAGGCCCTC GGCCTAAAGG TCTGGGAGGG TGAGCGACCT GCGAGACTCA CAAGAGGGGA  
AGCTGACAAG AGATACCTAC AAGACGGGAG TRCCTGTGCC ACCTGGTGCC GACAAGAAAG CCGAGGCTTG GGTCTGGGTC  
AGCAACCGAA TTCCAGTTTA GAGGCGGATT TVGGTGTGKG ACGGTGTGAC CCAC

SEQ ID NO:23: (Length of Sequence = 322 Nucleotides)

CAAAACGTGA TCACCACAGC TCCGTTCCCTG CAGTGACACT TAACATACTC AGCATCTTCA TGAATTCTGA ATAATTTACT  
GATCGTAAAG TCTAAAAGTA TCAATTCAG GTGAGCAGTT TTAAATCAGA AAATAGTCAA TAGTTAATCA TGAATCTTCA  
GGGTATTTCC TTCAGTCTCT CTGAAGAGTT TCCAGAACAA TTCTTGTAAG AAGGAATGCC TCCCAACAAT GGAGAGCAAC  
AATAGCAACA GGCATCTGAA TCAGCCTGGC CTCGAAAAC AGACCANAGA GGAGTTTATC TGTTTCTTCC AGTGGAGGAA  
GG

SEQ ID NO:24: (Length of Sequence = 113 Nucleotides)

CCTGAAATCG GAGTCTTTTG GACTGACTCC AAATTCAATG GGTGGCACAG GCAGCACGGA GTCCACGTGA ATCTCCACCC  
CGTTAACAGG CGGGACGACA GCCCCTTGCA GCC

SEQ ID NO:25: (Length of Sequence = 399 Nucleotides)

GGAAAGAATG AAGGAAAAAC AAGACAAAAT CTACTTCATG GCTGGGTCCA GCAGAAAAGA GCAGACGCTG GCCTCAGACA  
CAGACAGCAG TCTTGATGCC TCGACGGGAC CCCTTGAAGG CTGTGATGA TAGGTTAGAA ATAGCAAACC TGTGAGCATT  
GAAGGAATC TCACCTCCGT GGGCCGTGAA TGCTTGGGAG TTGATGGAAC CAAATAGAAA AACTCCATGT TCTGCATGTA  
AGAAACACAA TGCCTTGCCC TACTCAGACC TGATAGGATT GCCTGCTTAG ATGATAAAT GAGGCAGAA ATGTCTTGAA  
GAAAAAANTT GCAAGCCACA CTCTNGAGA TTTTGTTCAA GATCCATTTT AGGGTGAGCA GTTAGAGTAG GTTGAATTT

SEQ ID NO:26: (Length of Sequence = 355 Nucleotides)

116

GATTGGTATA CGGGCAACAA TGGATTGATA GCCTTAATAT AGAAATAGTT CCAGCAGGCC AGATGCAGTG GCTCAATTCT  
GTAAACCCAG TGCTCTGCAC AGCTAGGAAG GAAGATCACT TGGGCCAGG AGTTCAAGGC TCCAGTGAGC CATGATCAGC  
CCACTKCCTC CAGCCTGGGT GACAGAGTNA GGCCCTGTCT CTAAAAAATG AAATAGCTCC ATCAAGTCAA TAATTAAAAG  
TTCAACAGCC CAACAGANCA AAAATTGTAA ATGANCACAA ATTAGAAAAT GTACAAATTA AATATTAAATG ACCCATAACC  
CTATAAGGGA AAGTTTAACC TCTCTAGTAT TTTTT

SEQ ID NO:27: (Length of Sequence = 322 Nucleotides)

AAAACGTGAT CACCACAGCT CCGTTCCTGC AGTGACACTT AACATACTCA GCATCTTCAT GAATTCTGAA TAATTTACTG  
ATCGTAAAGT CTAAAAGTAT CAATTTTCAAG TGAGCAGTTT TAAATCAGAA AATAGTCAAT AGTTAATCAT GACTCTTCAG  
GGTATTTTCT TCACGTCCTC TGAAGAGTTT CCCAGAACAT TCTTGTAAGG AGGAATGCCT CCCAACAATG GAGGAGCAAC  
AATAGCAACA GGCATCTGAA TCAGCCTGGG CTCTGAAAAC AGACCAAAGA GNGTTTTTTC TGCTTTCTTC CAGTGAGGAA  
GG

SEQ ID NO:28: (Length of Sequence = 287 Nucleotides)

TATTTTATTT AAAGGACCAC CTTGGCTGTM GTGAGATGAA TGGATTCAAA CAGGGCAAGA GTGGATACAG MGAGATAAGT  
TAGGAAGCTG GTATAGAAAT CTGGATGAGA TATGGTGGCT TGGATGATAC TAGCAGTGAG TATGGGAAGT AGGTGGATTA  
CTTTACACTT TTTTATGATCA GTCTATTCTT GATGCTCTGA AGACAAATTA ATCTCATATA TAACTCTAAA CAACATATTT  
ATATTTTCATG TAAATAAGGA TAATGCTGAC CAAATATTAG CACCTTT

SEQ ID NO:29: (Length of Sequence = 282 Nucleotides)

CAGGGCAGGG AAGCCTGGAA GCAAAGGAGG ACCTGGCTCC TGACTCTCAG AGAGGATAGG CTGGGATCCC TGGGGCAGGC  
CTGTTCTCTG GCTGGCCAAT TTAGTCTTTC AATTGTCTAA GGGCTCTCCA TTGCCTGCCC TTGCCTCTTT CTAGCCTGTT  
ATTTCTAGGC TCCTCTGAAT AAATCTCAGG TTCTCTACTG TCATGCCCTT AGTTCAAAAA TGAGAATCTG CCTACAGTG  
CTGGCCTCCT TCCGGCCTGA AAGCCAGCAC CTTKCGACCC GG

SEQ ID NO:30: (Length of Sequence = 345 Nucleotides)

GAAGCTGGTG AATACATTTT AAGACACAAC ATGGCACCTG TGTCTAGCTC TATGGTACAA CATGGTACTA TGACACATAT  
AATGGGTTGC CAGATGGGGA AGGCAGCTTC TCTGCAACTG AGCTGAGATC TCAAAATAGA CAATGTCAAG ATGGAATGAG  
AAGGGAAAAA CAGCATGTGT AGACAGGTAG TGACAAAAGG CTAATTAAGG ACTGAAAGAA ACCAGTGGCC AACAAAGGAA  
TCTACGGGTG ATAAAGATAA GACGGTGAGA GAGATAAGGC TAGATTGTAT AAGGCTTGAC AGACCATAGC AAGATAAGCA  
AGGACCTGTG TCCTGTTAAC CATT

SEQ ID NO:31: (Length of Sequence = 343 Nucleotides)

ATAAAATTGG TCTGGGTACC CTAAGGTGTT TGCTTGATA GAAAATTGAC ACCCCAAACT AAGTGTCTA CTTAGCTTCT  
ACAATAGTTA TTCCTAGACC TTAGATTAGT CATTACATTT TTATTTAAGG TACTATGTTA CTTTCATGAC TACAAAATGA  
GGCACTCGTA CAAAACAGGA ATGAAAACAT ACATATACTG TCTGTCTTT ATGTCGTATT AATGCCAAG ATATTGTCAG  
GGATTATTTT AAAGAAGCCC TTAATCATGA TGGCTATTTT TAAAAATGGC ACAGGACAGT AACAGGCTGA AAAGAAACAC  
CTGGTTTGAG GGGCCAAATT AAG

SEQ ID NO:32: (Length of Sequence = 153 Nucleotides)

ACAGGATGGT CAGGACAAGC CACCTCTGGT AAAGTGACAT TTGAGANGAC CCCTGAAGGN GGGGGGTTGA GTCATGTGGA  
CATCTTGAGG AAGAGTTTAC TGGCACAGGG AACTGCAAGG KCAAAGTCCC CAAGTACTAG GGCTGGGGGC AGT

SEQ ID NO:33: (Length of Sequence = 257 Nucleotides)

TCAGTCAGCT TATCGCAGGT GCAGCCAAAC ACAAAGCTTC AGGACAAATT GTACAAACTT TACAATGTGG GATTTAAATT  
TAAAATATGA TACATAAAAA TCTACACAAA ACTGATAAAA ATCAAGCACA GNTACCAGGA TTGAAACTTA TAATAATCCA  
TGTGTGAAAG GGAGTCTTGT TTCTTTTCAA GTGCTTTTAT TCTGCTATGG AACAGTCAAA ATGGAAGNTG TAAAGCTTTG  
TGGTTAGTTT AAATTAT

SEQ ID NO:34: (Length of Sequence = 307 Nucleotides)

CTCCACCCCA TATCTAATCC AACAAAGTCCA GCTGCCTCTC TCINAAMAAT ACCNARGATC AGGCCCTTC TCAGCACCCC  
CACAGCTGCT GCCCAAAGG AAGCCACGTC ATCTCTCAG GAGATTGTC AGCAGCCACT GCCTCCTTGT CACCTTCGCC  
TGTGGTCAIT CTCCCCACAT GGCCAGGGAA TGGTCTGT TAAAGTCTGC TAGGTCACGG TCCTTCCTAC TCAAAATGCT  
CCCTTGGCTC CCACTGCCCC CAGAGTAAAA AGCCAGACC TTCAAATGAC ACAAAGGCCT ACAACGA

SEQ ID NO:35: (Length of Sequence = 266 Nucleotides)

TCCACAGGTC ATCAGATRCC TGCTNGATAA TATATAACA GTAAAAACAA CTTTCACTTC TTCCTATTNT AATCGTGTGC  
CATGGATCTG ATCTGTACCA TGACCTTACA TAAGGCTGGA TGGACCTCAG GCTGAGGGCC CAATGTATGT KTGCGTGTGG  
GTGTGGTTGG GAGTGTGTCT GCKGAGTAAG AACACGNTTT TCAAGATTCT AAAGCTCAAT TMAAGTGGCA CATTAAATAT  
AAACTCAGAT CTGNTCAAAA GTCCGG

SEQ ID NO:36: (Length of Sequence = 388 Nucleotides)

CAGCTTTGGA AAGACTTTGA CCTCTGAACA AAAAGCCAGA AGGCTGCTTA AAGAAATAGT AAGGGTTTCA CTTGCCCTGG  
ATAGTCACAA ATCTAGGAGT ACTGGTTCAC TGCTTGGGT TACCAGGTAT CAGCTCTTTC ACAATCTCTC CTCTTCCCAT  
GCCTCCCTTT AAAGTCCAGT TGACAAATGA AAAAGAAAAA AAGGCCTTGA TTTATAGTAT TGCCAAACAA CCTCATAAGA  
ATGGGTAAAA TTACATACAC ACATACATAG AGAAGGGAGG TAATGCTGTG AATCTACTTG AGCTGGATTG CATGCTCCCT  
AGGGACCACG GTGCCCAACC TGTAATTTTA TTCTAACTT TTATAAATAT ACTCCTTTTT CACGGATG

SEQ ID NO:37: (Length of Sequence = 342 Nucleotides)

GAATGTCTAC ACAAGGAAGT ACAGGATTTG GCTTTTCTAG ATGTCATATC CAAACTTCGC AGTCATGAGA ACAAAGTGT  
TGCCACGAG GCCTCTCTCA CAGAGCAGAG ACTTACTGTG GAAAGCTGAG AACTGCCCGA TACACGGCAT CATCCCATCT  
CTAATTTCCC CTCTGTCTC CATCCAGCGG CTCTTCCGC TTCATTCTCT ACCATAACCAC TTGTGCATGC ATGTRATGTT  
CTAATACCAA TTGAAGAACC GCTGTAGGTA CCTCCCTAAT AAGGATTCT AAACCTATAG TTAGTGTGAT CATGACTTTG  
GTCAAAGGCA AGTYTCCCAC CC

SEQ ID NO:38: (Length of Sequence = 355 Nucleotides)

GATGACTTGG AGAATGCCGA AGAGGAAGGC CAGGAGAATG TCGAGATCCT CCCCTCTGGG GAGCGACCGC AGCCAACCAG  
AAGCGAATCA CCACACCATA CATGACCAAG TACGAGCGAG CCGCGTGTCT GGGCACCCGA GCGCTCCAGA TTGCGATGTG  
TGCCCTGTG ATGGTGGAGC TGGAGGGGGA GACAGATCCT CTGCTCATTG CCATGAAGGA ACTCAAGGCC CGAAAGATCC  
CCATCATCAT TCGCCGTTAC CTGCCAGATG GGAGCTATGA AGACTGGGGG GGTGACGAG CTCATCATCA CCGACTTGAG  
CTGGAGTCAT CTTTCTGMC CTTTGCCCCA TGCCC

SEQ ID NO:39: (Length of Sequence = 303 Nucleotides)

GCCAAAAACA NYTCTGAACC CGTTTIGGGA AATAATGGGA TTCCTTGATC ACGGGACAAC GAATCACCCCT GAAGTTTTTC  
TCCAGTTTAC TCAGTCACAT AAGCCACCAG AGGCTAACCA CACTGACAAC AAAAGCAAGT CCCAGGATTG CGGGGGCTAA  
TACCATGCTA GGCATTACTT GGGAAATTAT GAGTTGGTAT ACATCTGTGA ATTTGGTGGG AGGAGAAAAC TAACAGTAA  
TTTATCAAAG CCAGTGGTAC GTTCAGCGTT ATAAAAATTA CAAGGATCTG CTTCTCGGCG ACT

SEQ ID NO:40: (Length of Sequence = 178 Nucleotides)

GGTGTGGGG GCTAGAGATA CACATGCCAG TNCATACAT TTCTCAGCAC TGTGCTGTG ATTCACAGCA GTTCAATTGT  
TCATGCGATA TAAGCCAGTC ATGTGGCCCA AGTTATTCTG TCGGCTGTGT TCTCTGCAGG AATCTGATGC AAGAAGGCCT  
GAAGGATGCA TGGCTTTT

SEQ ID NO:41: (Length of Sequence = 322 Nucleotides)

TGCCTTTCTT TAGAAATTTA GGGCAGTGTG ATGCTTCCAG AGGCTGTGAC AAACACCAGC TTTCATTGTG CTGGGAGTT  
TCCATGCCCTC TYCCTTCTCT TCGCTTAGTG CAGGTTTCTG CTTTTATCA GTTTGACTGC CTGAGACTGA KTCCAACAAC  
CCAAACTGAA CGCTCAGCTC CTCCKTTTCA AAGGAGGATG ACTTNTCTNA ACAACTATTT AGGTGAATTIA TTKCKACAGT  
TTATTAAAGC AATGGCTCTA AACAAATTCC ACTGGGGGTG ACAAAGTACA ATACAAAAGG CGTACTCTGA GGGCTTGGGG  
GT

SEQ ID NO:42: (Length of Sequence = 278 Nucleotides)

AAACTTTGGC ATTTTATTTC AGACACGTAT AAAAACAAAA CAAAAAATT CAGTGATACA ACAGACGTTT TCCCTTAGTT  
CCCCATCCAA GGGGACAGAG GTGTGCAGCT GAAGCTGGAY CTTTTTCTG TCCTACCTGG AAGCTGTCTC ACTGCTGGAT  
GAGAATGGCT TCTAAAAGTG GATCTTGGGG ATCCTTGTGA ATTTGCCCTC GGATAAGGAG TGAAGWTCAT TTACGGCACA  
TGTGGATTAT GGTTTACACA AAGATGTCCA GTTATTTT

SEQ ID NO:43: (Length of Sequence = 225 Nucleotides)

AGATCAAAAG ATGAGAGAAG CTGAAACAGA ACCGCATGAG GGAAAGAGGA AAGTGGAAATC TCTGTGGCCC ATCTTCAGGA  
TCCACCACCA GAAAACCGT TACATCTTCG CCTCTTTTAC AAGCGGAAAG CCAGCAGCAG GATCTCTAGG AATATTAGTA  
TTAAGAAGG CTATGCAGCA TAAACCTGAT TTCAAATGG TAAAGCAAG GTTATGTGTA CTTGT

SEQ ID NO:45: (Length of Sequence = 305 Nucleotides)

GGATTGCCAG GAGCTGTTCC AGGTTGGGGA GAGGCAGAGT GGACTATTTG AAATCCAGCC TCAGGGGTCT CCGCCATTTT  
TGGTGAAGTG CAAGATGACC TCAGATGGAG GCTGGACAGT AATTCAGAGG CGCCACGATG GCTCAGTGA CTCAACCGG  
CCCTKGGTAG CCTACAAGGC GGTGGTTTGT GGGGATCCCC ACGGCGAGTT CTGGCTTGGG TCTTGGAGAA AGGKGCATAG  
CATCACGGGG GGACCGGAAC AGCCGCTGTG CCGTGCAAMC TGCGGGGACT GGGATGGGCA AACGC

SEQ ID NO:46: (Length of Sequence = 264 Nucleotides)

ATGAAATAGC ATATCTINNGC CTAATTAAAA GATTCCATTA CATTTACTTT TATCATTTAT ACTGCCAAGG ATCAGTCACA  
AAAAATTCAA ATTATACATA TTATTATGTC TTTAATTICA TAAATAAGTA AATTAAAGCA AGCCAATATG TCTCTCTTCA  
TAACATAGGG AAAAATTACT GTTTAGCATA ACAGNGTAAT AGGCAAAGTC TAGCCATACA GCAGCAGTTC ACGGTGTTGT  
CAAGTTGGKA CAGGTTCCAT CGAT

SEQ ID NO:47: (Length of Sequence = 175 Nucleotides)

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GATCTCTTCC AGCGTCAATG TACTGGGACA GCAAACACTC ACATTTGAAG TTCCTTCTGG CCACCGGCTT CCCAGTACAT  
TGACGCTGGA AGAGATCATC TCAAATGGTT CTCCAGTGTC AGGCTGGAGA TCTCCAGAAA TGGAGTCTAC TCCTGGGGTG  
GCTTGTATGG GAGCC

SEQ ID NO:48: (Length of Sequence = 270 Nucleotides)

GTCTGTGAGA GCNACCGGC AGCTCAMRCC CACAGCGGCT CCTCATCCTC TGTGGTGGCA TCCTCATTCC ACTCTCATCT  
GCCACCTKCT CAGGCGGGCC TCTAGCTTTC TCATGTACTC TAGCAATTCC TGTTCCTCCT GCTGTAACCTG CTCTTTTCC  
TCTGGAGCA CACGCAGGC TGACCGCAGC TGTGTGAGCT TCCGCTTACT TMTGACAAC TGTACCAGGC TAGAATCCTT  
TCTGCCTGGG TCAGCTTCAG TCTTTGAACA

SEQ ID NO:49: (Length of Sequence = 359 Nucleotides)

CCCTGAAGAG TGGGTGGGAC AACCAGATGG GTGTAACCCC TGTGGGGGA AAAGGAGTGA GTTACTTGG TAAAATAATA  
ATGGTAATGT CAGCAGCGTG GCTGGGGGAC TCAGTATGGT CCCGGGAAA GAGTTGGGGC AGTGAACCTC CCAGGCGGAC  
TGGCCTTGGG CTGGCAGCAG GGAGGCTGCA GGGCGCCTAC CTMCTCTGCC ACGTCCCTGC CTAGGAAACC TATCCCAGGA  
CACCCTGCTT TGGCCTGGAT AGCAGCCTAG GGATGAGCAT TTCTTTGAAA GCAATTAGGT TATTCACCTG GTATTAAAC  
TATTTACTGT TAAAAAATCT GTGACTTCAT GGARGTGGG

SEQ ID NO:50: (Length of Sequence = 271 Nucleotides)

CCAGGAAGGA CAGGAAGTGT CCTCTAATAC GCATAAGATC CAGTACAGGA GAGATGGGAA GAGAGKCTCC AGGATGAAGG  
GGAAAARAGG CGCATGCCA GTCACCTGGC ATCTNCCAGA GAGGGYAGY CTNCCACTG AGACTGGGSC ACGAGTCCCG  
TCATCACCAT GCCCTCTGAC TGTCGAACCTG TCTTTTTACC TGACAAATAC TACACAGGTA TCGMTCGTGG CCATACTCTG  
CTATCTAAAC CCAGGAACCTG ATTAGATTGT T

SEQ ID NO:51: (Length of Sequence = 226 Nucleotides)

CTCCAAGCAG TAAAGACTTG CAAAGCATTG CATTTTGATT AAACCTTGCT GGGCTGAAGG GCAGGCAGAG CTGTGGTGGG  
CACTGGCAGG ACGCAGCACC CCCGACTGG CCTTGGCAG GCTGCACGG GCGCATGCGG GTGTGGGCCA GGGTGTCTTT  
AGGAAGCAGG TGGGAGTCTK NCAGTGCAG KCGGTCCAGG AGRFYACCAK GCGTGGCAGG GCACTG

SEQ ID NO:52: (Length of Sequence = 408 Nucleotides)

GGTGGGGCAA GGTGGGGGTG AAGTGCACTC CTGCTGCATG AGTGGCAGGG CAGGGTGCAC ACACACACGT GGGTCTGGC  
TGGGTGAGGC AAGCAAAACC TGCTGCACA TGGCAAAGG ATGTGGGAAG TATCCATGGG CNCCAGGGGA AGCTGCAGTT  
TGGGGAGGGA ATGGGTGGCA CTGCTGCGTG TCTGTGGGGG CCACCCACT GGGGTCTCC AAGTGGTCAA GTTCCGTCTG  
CCAGGTTAGA AGCTATGATG GGGGCTTCTA GGACACTNGA GGCTGACCTG AAAGCAAGGT ACTTTTCACA CTGGGACCCT  
GCAAGAGGCC AACAAAGATTA AGGGATGCTT CAGGTGAGAC TTGGCCCTCT TCTTATGGGG CAAGACCTTC CCGCAGAGT  
TCAGATCT

SEQ ID NO:53: (Length of Sequence = 314 Nucleotides)

TTCTGTGAG GAGGACCACA TGGCAGTCCA GCAGACTGCA CATTTTAA AACTAGGTCT TCCAGGTAG TTTGAGGAGC  
ACCAGGGCAC ACTCAGGGAA GGGACATGTC AGTGTCTGAG AGCTACGGG AGGAAGGTGT AGTGACAACA TGGACCATGG  
TGGAGTGAAT TTAGACGGCT CTGGGGTINAG GAGAATCATC ATGTAAACAA GCATTAAATC ATTTGGAGAA ATTCAGAAAA  
NCTGTAGATG TACATTCTAG CCCACTTACC AGGCCTACTA AACGTCAATC AGATATATTT CAATTGAAT TCGG

SEQ ID NO:54: (Length of Sequence = 310 Nucleotides)

AAGCCACCGC ACCTGGCCCA TTACATTTAT AATGTTATAA GGGGGTTGAG GGGTGTGTTCA CTGGAGCAGT GGTTCCTCAA  
 CTCGTGTATG CATAGGAATT ACCTGAAGGG CTTGTTAAAA CACAACTGC AGGGCCACC CCCAGAGTTT CTGGTTGGGG  
 AGGTGTGGGC TGGGCTTGAG GATGTGAATC TCTCACAAGC TCCCAGGTGA GGCTGCTGGT CTGTGGACCC ACTTCAAAGA  
 CCCAGTGAAT CAGAAGAGTC AGTGAGACTG GACAAATGAA CGCAAGACAG TCTTCAAAGG AGACCAGAGG

SEQ ID NO:55: (Length of Sequence = 252 Nucleotides)

TTTTTTTTTT TYCCGGGGAR GTCAACATA CTTTTTCAAC ATAGGATKTC TGACAGGAGG CCCTTGGMCA GGGTTCCTTG  
 ACCTCTGYTT CAAACCCAC TGGAAACAGA GCAAAGTCAT CAMGAAAACC CAGGACACCA GGGCAGGGG GCTGCACAAG  
 GTCGGGTAGG TCACAGTGGG CCAGCACACA GTGGCCCCGC CCAGGTCCAG CCCAGCCTGG GGGAGGGTGT GAGGGTTCCA  
 KGCAAGCTCA TT

SEQ ID NO:56: (Length of Sequence = 188 Nucleotides)

GTCAAGTCTA CCATCATTCT AGAAGGAAAA GGCATGGTGG GAATTCAGCA CCTGAACTTG TATTTACACC AGCCTCGGCA  
 TCTGGCAAGG RAATAGCGAT TGTTATAGT GATGCAGAGA GAGAACAGGA GGAKGAAGAA CAAATACACA CAAACAACCTG  
 ATCTAGGGAG ACTCCAARGA TCCAACAG

SEQ ID NO:57: (Length of Sequence = 304 Nucleotides)

AATCAGCCTG CAAGCAAAAG ATAGGAATAT TCACCTACAG TGGGCACCTC CTTGAAGAAG CTGATAGCTT TTACACAGTA  
 TTAGATTGAA ATAATGGACA GAAACACATT CTTGTCAAGA AAGGGGGAGA GAAGTCTGTT TGCAAGTTTC AAAGCAAAAA  
 GCAAAAGTGA AATGATTTGA GGATTTCTGT TCTAATTGGA GATGATTCCTC TGGTGTGTTAG AAATGGCAA TATTGATGAT  
 TGTGTGCTAT TGATTGGTGC AGGATACTTG GTATACGAGT AAATACITGA GACTCGTGTG ACTT

SEQ ID NO:58: (Length of Sequence = 261 Nucleotides)

CCAGAAGCTT CTTCCTTCT CTGTCTCTC AGTGGTTCCC TTCCCTGAAG TGCCCTCCCTT CTCATTAATT ATAGCCTGTG  
 TCTGAACATT GTGAGCTATA AGAACCCCTCA TATTAATGGT TAAGGGACTG TTGGAAATGA TGTGATTTTA TAAAAATGG  
 GGTCTTTGTG GAGGAGTCAG GAATGGTCAA AATGAGCTTC AGGTATGGGG CTTGCTCTRT GCTCCTGATA CCAAGGGTCT  
 GGCAAGCACA AAGGAAGGTG G

SEQ ID NO:59: (Length of Sequence = 470 Nucleotides)

AATACGTATT CTGAAGCCAC TATATCTGCA TATGTATCCC AGATTTGAAC AATTAAGTAA AAAGATGGTG AATGATGAAA  
 GCCAGTTTTC TGTCTGTAGA AGTGAGAGGT GACAGATAAC CAAAGGAAGA AGGCTAGAAT GGATAGAGGA CAGTGCTTAA  
 GTGTAGTTCC TGTTGCCTTT AGTCTTATAG ACTTCATTTT CAAAGTTTCT TAGCACCCCTT CTCCCCCTT TGGTGAGGTT  
 GTTTCACATA TTTTCTAGAC AATTAGATTC TTTTGTCAAA GTCTGTGTTT CATCCGAGA GCCTCTGATC TCTTAAATGA  
 TTTTAAAT TTACATACAT TAAGGTTTAC TCTGCTGTAA AGGTCTGTGG GTTTTAATCC TGCTCACAG TTTTGCATA  
 TGTTGGCCTT CTGCCTGGGA ATACTCTCCC AGATATTCCC CATGACTGGC CCCTTATCTT CAATCAGATC

SEQ ID NO:60: (Length of Sequence = 466 Nucleotides)

GTGTTTCAAG GGAAGGCAAC TMCAAGTTTG TGCACTGAA TTTCTGTAAA GTTAAGACAG ACTCAMCTTC TCATTCAATC  
 TGGGGCAGTG GATAACCTTT CTGAATAGAC CCACTTGTTT ACGGACAGG ATAGAGGTTT GCCTTCTTC TTTCTTGAA  
 TTTGGAGTGA GCACTAGGGA GGGGAAGTGC ATGGGTGACA TGAAGAAGGT GAAGATGTAG TAAAAGCATC ATCCAGGTAC  
 ACATTAACGG TGCTGCAGAA TTTTACAAT ACAACTGAGG GAGTCTGTAG TGGCAAAGC AATTACTGAG CACAAAAGCC

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AGTCTCAAG GGCTGATTCC ACCTTCCCTG TCCAGGGACT TTCTCAGCAA ACTTTGTTC TGAAGCAGTTG TTGGCTTTGA  
TGGTCTTAGC CAGTTTTTGG TGCAGGGGTG TTCCTCTGGT ACTAGGGCTA GGGCAGCTGT TTAAAG

SEQ ID NO:61: (Length of Sequence = 491 Nucleotides)

GACACCCCTC CTGCCATGAA GAATGCCACT AGCTCTAAGC AGCTCCCACT GGAACCAAGAG AGCCCTCAG GGCAGGTGGG  
GCCTAGGCCA GGGCCCCCGC AGGAAGAGTC CCTTCTCTCT GAAGCAAAGA GCAGAGGACC CACCCACCA GCCATGGGGC  
CACGGGATGC CAGACCTCCT CGAAGGAGCA GCCAGCCATC TCCAACAGCA GTGCCAGCCT CCGACAGCCC TCCACCAAG  
CAAGAGGTGA AGAAGGCAGG AGAGAGACAC AAGCTGGCAA AGGAGCGCG AGAAGAGCGT GCCAAGTACC TGGCGGCCAA  
GGAAGGCAGT GTGGCTGGGA AGGAGGAGAA AGGCCAAGGT GCTGCGGGAG GAAGCAAGCT CCATGGAGCG CCGCTGCCGG  
TTTTAGGGAG CAAACGTCTT AAAGCCGAGC AACGCCGTTT AAGCCTTGA GGAACGGCTA GCGGAAGAAG TTTGTGAAA  
ACAAGGGGCG T

SEQ ID NO:62: (Length of Sequence = 478 Nucleotides)

ATCATTGAGT ACGCAGAGCT CAAAACAGAC GTGTTCCAGA GCCTGAGGGA AGTGGGCAAT GCATCCTCTT CTGCCTCCTC  
ATAGAGCAAG CTCTGTCTCA GGAGGAGGTC TCGATTGTC TCCATGCCA CCCTTCCAAA ACATCTTGCC TAGAGTCTAC  
ATCAAAGAGG GGGAGCGCCT GGAGGTCCGG ATGAAACGTC TGGAAGCCAA GTATGCCCCG CTCCACCTGG TCCCTCTGAT  
CGAGCGGCTG GGGACCTCA GCAAATCGCC ATTGCTCGCG AGGGTGACCT CCGACCAAG GAGCGGCTGT CTGTGGCTGT  
CCATGTTTGA GGTATCCTG ACCGATTG GAGCTACCTT CAGGACCCAT CTGGCGGGC CACCGCCACC AATGCGTATG  
ACGTCGATGA GTTTTTGAGT TCACTGCTGT GAGCGCATGA GTGCTGACT GAATCCTGTG GACAACGGTT AAGTTACA

SEQ ID NO:63: (Length of Sequence = 183 Nucleotides)

CCTGGAAAGT GGGGGTGGG CAGGGGGCCA GGCCAGCAT GCACCCCAT TTTTGTGGG GCTGATCCCT GCCCCAGCTC  
TGCTGATACC CGGGGCCACA GCGTCAGGCC GTTGGGGTG GAGTAGAGG TGGGAGAGCA GGGGAGAGAG CCTKAGGAGC  
CACAATTGGG CAGACAGAAG CGG

SEQ ID NO:64: (Length of Sequence = 316 Nucleotides)

GGATATTGCA CCTTACAGAC TTAGGGAGCC TTTACCAGAG ACGCTTAAA CGCCCCAGGT TCAGCCATTG TGCTGAATAG  
AGTGGAAATAT AGAACCAGGG ACAGAGTATT TCATTTAACG TTGATATATA CTGTCTAAGG AAACACTAAC AATACTGTAA  
CTTTGTATAA GGACATAGTA TTGAAATGGG AAATAGAGGT CAGGCTACA TCATCTTAGT TTAATGCTGG GCACTTTTT  
CTGATTCTG TAGTCCCTG GAAAATGTGT CCTTCGTACC CATAAAGTGG TACAAATGCA TTTGTAACCA TTTTGT

SEQ ID NO:66: (Length of Sequence = 411 Nucleotides)

ATCTGGTCTA GAGAGGCGAC TCCAAGCTCT CTGTCTGGCT CCCAGCTGTG GGAATCCTTT AGGCTTGTTC TCAACCTACA  
CGTTAAAAAT GCTTCTTGGT GTGTTTGGG AGGGGAGAG GGAACTGAG CTCTCTCTG ACCTCCTCCA ACACCCTTGA  
CTTGTCTACC CAGCCATTTT CAGTAGCTAC ACGGTGGTC ACAGAACTT GGGCGGCACT CCGCACACAA CACAGAACCG  
GGGCACTCCA TGCAGGTGCG GGAACACATG TCGGACCCAG GGAGCAAGGA ACACGCCACC CCGAGGAACA TGCAAACGGA  
GGAAGGATTC CCTTCAGATT CCAAGGATGC CACAACCCCG ACGGGCGGCT TAGGGAGGCA CCGATTATCT AAGGAAAAG  
GCCACTGTTT G

SEQ ID NO:67: (Length of Sequence = 413 Nucleotides)

CTGCTCCTTA TGTTTTTATT TCCAAAGTTT AGAATTTCTT TGCTTCATAG TATTATTTTA TTTTACTAAA TTACAGAGTA  
AGAAAAGCTT TTCATTTTAT CTGATTTTAT TCTTGAACA AAAATATTAC GATCTCTAT ATTTTGTTC TTTTGCCAAA

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AAGTGTAGGC AATTTTACAT CATCTTTTTT CCCAATCAGT TTGTGATCCA ACTATAAAAA GGAGACATAG AATACTGAAT  
 AAATGAAACA GAAACTCCAA GGCCAAGAAG TGTCATCTT GAAAGAGTGT TAGTGGCAAG ATATGTGACT GCAGACTAGA  
 TGTAGACAAA CCTGAGAAAA ACCAAGCATG GGGGAAAGGA TYCCTATTTT AATAAATGGT GCTGGGGAAA ACTGGCTAGC  
 CATATGTACT TTA

SEQ ID NO:68: (Length of Sequence = 372 Nucleotides)

GCACGGTTAA AAGACCAACG TGTGTGNTC AAATATAAAG GCCACACCTT TCAGACCGAA CCTACTCAAA GATCCTTTAC  
 TTTGCAATAA TTTGAAGTGG AGAACCAGAG ACGGGAGACG AATGAAAGCA AAGATGCTCA AAGAACCAAA GGAAAGACCT  
 GAAGGAATCC ACCTGCATAG GCCACGCGTT CCACTCTGGG TCAAATGCTT CCACGATGCA GAAACCTTTT TTTAAAAAG  
 TGCAAGTCTA ATTACCTACC AAGGGTAATA AAAAGCACAG CACAGGAATG ATTACAGCTG ATGGTCAAAA AACAAACCAA  
 AACCATTAAA AAAACAATCA GGCAGAAAAC AGGAGTTAAA TGTTTACATA TG

SEQ ID NO:69: (Length of Sequence = 389 Nucleotides)

TCTAGAACCT GGACCCACCC AGCGCGTCTT TTCTTATCCC CGAGTGGATG GATGGATGGA TGGATGGTAG GGATGTTAAT  
 AATTTTAGTG GAACAAAGCC TGTGAAATGA TTGTACATAG TGTTAATTTA TTGTAACGAA TGGCTAGTTT TTATTCTCGT  
 CAAGGCACAA AACCAGTTCA TGCTTAACCN TTTTTCCTT TCCTTCTTT GCTTTCTTT CTCCTCTC ATACTTTCTC  
 TTCTCTCTT TTTAATTTT TTGTGAGATA ATATTCTAAG AGGCTCTAGA AACATGAAAT ACTCACTAGT GGATGGGTTT  
 CCCACTTCTC CTCATCOGT TGCATGAAAT AATTACTATG GTGCCCTAAT GCACACAAAT AGCTAAGGG

SEQ ID NO:71: (Length of Sequence = 329 Nucleotides)

GAAAAAATGG GAGGGCAGCC ATGTATTAAT TGTACATCCA AGGAACTGT GCCCCAGGGG TCTTGTGTGT ATTTCTGAGA  
 AGAGGGGTGA GAAAGGCAC TGTGTCAACA TTGTCTTCTG CCTGAACGTG CACCTCCAG TGCTCTCCA TCAATTAGGA  
 GAACTGTCTT GAAGAATGCT GCCTCAGCTT CTGAAGAGAA GACCCAGGA CATGCATTAA TGAGAGGAGG GGAGTCACAG  
 CTGCAGAAGA ATAAAGCTCT CTGAGGGAGC CTGGGNGCCC CAGTGGAGG CCTGGAGCTT GTTGACCANN GCAGCAGGAG  
 ACCCTGCT

SEQ ID NO:72: (Length of Sequence = 418 Nucleotides)

CTGAGTTGCC TGAGGTCAAT CACATGCTTC AGCACCAGTT CCCATCTGTT CAGGCAAATG CAGCGGCCTA CCTGCAGCAC  
 CTGTGCTTTG GTGACAACAA AGTGAAGATG GAGGTGTGTA GGTAGGGGG AATCAAGCAT CTGGTTGACC TTCTGGACCA  
 CAGAGTTTTG GAAGTTCAGA AGAATGCTTG TGGTGCCCTT CGAACCTCG TTTTGGCAA GTCTACAGAT GAAAATAAAA  
 TAGCAATGAA GAATGTTGGT GGGGATACCT GCCTTGTTGC GGCTGTTGAG AAAAATCTAT TTGATGCAGA AGTAAGGGAG  
 CTGTGTACAG GAGTCTTTGG AATTATCCCT CATGTGATGC CTGTAAAAAT GACATTCATT CGAGATGCTC TCTCAACCTT  
 AACAAACACT GTGATTGT

SEQ ID NO:73: (Length of Sequence = 336 Nucleotides)

CTGAATTTTT ATATGCTTCA CTTAGGCTTT CATTGAGTA GACTCTAAAA ATTCTGCCTT GCTTAAGTNC TAACACTGCC  
 TCTCAGATTT CAGTTTGGG CATTGCACAA CTAAGACCTT TTAAACGCAT TTNCTTGCTA ACTCGGAAGA CACATAGTCT  
 GCAGCAAGAC ATTCTATAT TGAAGAAATG AGAGAAAATT TTATGCTGCA TCAGGTGGAG AGCAAGGCTC AACGGTGGT  
 GCATTAGTTC CCTCGAAGT ATTGAAAAAN CTTTGAAATG GGAAGGAAA TTTTTCAC CTAATGTTCC TGAGGTACCC  
 AGAATGTCTG GGGGT

SEQ ID NO:74: (Length of Sequence = 402 Nucleotides)



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GTGCTCAGTA AATACAAATT GGATGGACTA GAGAGATAGC CCGAGGACA CTGCCAAATA AATAACAAAT TGTGCAAGCA  
 GCAGGCCGCT GTAATTAGAC CAAGGAGGAC AGTCAGTTAT TAATATCAGA CACGTGGCAG GGTAAACAGC CACTGAGGGT  
 GGGTACAATG AAGAGAGTCA CTTTCTGCAC CCTCAGGGAC TTCCCTTGTTG ATGGCCTTCT AAAGAGGGCT GAACAGCACC  
 AAGTGCCCTC GCTGCCTCTG GTTCTGCTG CCTCCCGGT GCCTTGGGTG CCCCACAACT AGGGCCCTGG GTCCCTCCCA  
 TGTCCCCCTC CCTCTACAA CCCCTCAGCC CCTTATCTGG CCAGCCATTG TGATGCCTAT CAGTATGAGG CCAGATGAGA  
 GT

SEQ ID NO:75: (Length of Sequence = 454 Nucleotides)

GGACCCCGGG CCGCGATGT GGCCAGTAC CTGCTCTCAG ACAGCCTCTT CGTGTGGGT CTAGTAAATA CCGCTTGCTG  
 TGTTTTGATG TTGGTGGCTA AGCTCATCCA GTGTATGTG TTGGCCCTC TTGAGTGAG TGAGAGACAG CATCTCAAAG  
 ACANATTTTG GAATTTTATT TTCTACAAGT TCATTTTCAT CTTTGGTGTG CTGAATGTCC AGACAGTGA AGAGGTGGTC  
 ATGTGGTGCC TCTGGTTTGC CGGACTTGTG TTTCTGCACC TGATGGTTCA GCTCTGCAAG GNTCGATTG AATATCTTTC  
 CTTCTCGNCC ACCACGGOGA TGAGCAGCCA CGGGTCGAGT CCTGTCCCTG TTTGGTTGCC ATGCTGCTTT TCCTGCTGTG  
 GACTTGGGGC CGTTTGCTCA TTACCGGGTA CACCACGGAA TGCACACCTG GCIT

SEQ ID NO:76: (Length of Sequence = 313 Nucleotides)

GCTTTGATAG CTAGTTGTCT AAAAGTGCTG NITATTAAAT AATCCACCTN TTTCCCACT TAAACATCC CTCTTACCAT  
 ATACTAAATT CCGTAGCCC TGGGTCTGTT TCTGGACTCT CCGTCTGTG TGACCCCTC CAGGTACAC TGAGTGAGGT  
 AATGGTGGCG TGAGAATCCT CTGGGAATCT GGCAGGNTCA CCCNGAGCA GTCCACCCCN CAACTCATTA NCATCGTTCA  
 GAGTGGNCTG AGTGNCTCTA CACATTCAT CTGCCAAATG CACTTTAGGA ACTGTCAAAT TCCAAAGTTT CAA

SEQ ID NO:77: (Length of Sequence = 446 Nucleotides)

CTCAGCGTA GCCTAAGTC GTTTTCCAA TTTAGGAAGC TCACAACGCA GATCTGCATT GTCACGTACC AGCTGTTTGT  
 GAACCTTTGT AAGCTGTTCC AGGTTGTTCT CAAGAAAGGA AATCTTCTGC TTTTGGGAGT GAATCCCCC ACTGTCTTCTG  
 GGCTCCATTT CTGCACTTTT CTGACTCGA GTGCTGACGT CTTGAACGAA CAGCTTGCGA AGGTTGTGGC SGGTCTGGAG  
 TTCCCGGGCA ACTGTCTCTT CCAGACCTT GAGGTCTGC TTGTGACTGC TCAATGTGCG TCGTACAGAA ATGTCAGCTC  
 CTGCAGCTTT GTGCTCTTC TCGTGGTTCT TCGCTCTTTC AGCTTCTCTG TAGTCAAGCC TGAAGGCTTC TCTAAGCTCT  
 AACTGGAGCT TCTGATTTAA GTCTTTTGA GCTCATCAA TGGTCT

SEQ ID NO:78: (Length of Sequence = 296 Nucleotides)

AGCCGGTGGC GCAATGGAGA GAATGTGCCT GAGACAGAGC GCCTGGCTGG GGAGGAGGCA GCCCTGGGNG CCGAGCTCTG  
 TGAGGAGACC CCGTGAATG ACAAATCATC CATGTGGTG CGCATCGGC COGAGGAGCG GCAGAAATAC GAGGAGGAGA  
 TCGCCGCTCT CTATAAGCAG CTNACGACA AGGATGATGA AATCAACCA CAAAGCCAAC TCATAGAGNA GCTCAAGCAG  
 CAAATNCTGG ACCAGGAAGA GCTGCTGGTG TNCACCGAG GAGACAACGA GAAGGT

SEQ ID NO:79: (Length of Sequence = 285 Nucleotides)

CCTTTCTGCT CTGGGAAGTG ATGACTCGCA GGTGGGGCTT GCGGCTGGGG GCTCCAAGCT GGGTGTCTGT GGTAGGTGGG  
 GGCGGAGACT TGGCAGGGAT GACCTTGTTT AGGCTGTGTC CATTTGCCAC AGGGAGGAGG CCAGGGGAAG CCCGAGCACT  
 GACGTAGCCA TTCCAACAG GGCTGGGGCA GGCTCCGTTA GCAGTGTTC GGTCAACNCC CAGCATGGCC  
 CCGCACTACGCTG GGGCAGGCCA GGAGACACAC TGTCTCTCTG TAGTG

SEQ ID NO:80: (Length of Sequence = 402 Nucleotides)

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ATGATTTCTT GCCTGTNATA ACCTATGCAC TCACAAAGAT GAACTCTCTG AGAGGGATGA GCAAGAGCTT CAGGAAATCC  
 GAAAGTATTT CTCCTTTCCT GTATTCCTTT TCAAAGTGCC GAAACTGGGC TCGGAGATAA TAGACTCTTC AACCAGGAGA  
 ATGGAGAGCG AAAGATCACC GCTTTATCGC CAGCTAATTG ACCTGGGCTA TCTGAGCAGC AGTCACTGGA ACTGTGGGGC  
 TCCTGGCCAG GGATACTAAA GCTCAGAGCA TGTGGTGGG ACAGAGTGAA AAGCTGAGAC ACTTGAGCAC ATTTTCTCAC  
 CAGGTGTTAC AGACTGCGCT GGTNGATGCA GCCAAGGCC TGAAACCTGG TGCAGTCCA CTGCGTTCAC ATCTTTTATT  
 AA

SEQ ID NO:81: (Length of Sequence = 246 Nucleotides)

CATTTTTAAT AGAGACGGG TTAAACCATG TTGGCCAGGC TGGTCTTGAA CTCTTGATCT CAGGTAATCC ACCCACTATG  
 GCCTCCCAA GTGCTGGGT TACAGGTTG AGCCTCTGTN CCGGCCCGG CCAAAGACTG CCTATCTTAA ACGTTGCTGA  
 GGACGTGGAN CAATCAGAGC TCTCTNTCT TTCCAGTGGG AGTTTAACAT GGCACAACCG CCTGAAAACC GTTTGNGAT  
 TTCTGT

SEQ ID NO:82: (Length of Sequence = 394 Nucleotides)

GGGAACCTC AGCAAAATAT AATGGTACCG CTATTATCAG CCTTGTTCGA GGCCAGGGA TTTTGGGGGA GGTCACAGTG  
 TTCTGGAGGA TATTCCCTCC TTCCGTGGG GAATTGCTG AAACATCAGG NAACTGACA ATGCGAGAGC AACAGTCTGC  
 AGTCATTGTA GTAATACAGG CTTTGAACGA TGACATTCCT GAGGAAAAA GCTTCTATGA GTTTCAGCTC ACTGCAGTCA  
 GINAGGGAGG AGTTCGTAGT GAATCCAGCA GCACINCCAA CATCACGGTG GTGGCCAGCG ACTCTCCCTA TGGCCGATTT  
 GCCTTTTINAC ATGAGGCAAC TTCGAGTGTC AGAAGCACAG AGGNTAACA TCACAATCAT CCGTTCAGT GGAG

SEQ ID NO:83: (Length of Sequence = 308 Nucleotides)

ATAAGACCAT TGGCAAAGG AGAATTCATG AACTGAAAGA TCTGAAGTAA TTTCCAGAA TGTAATGTA AGAAATAAGT  
 TAAAAGGCAG AGCATAATGA GTCTAACATG TGTGATTGAA GTCTTATAAG GAGAGAATTA AGAMCAGGCA ATATTTTAAA  
 GGRATAATGG AGAAAATGGA ATAATTGATG AAATATGTA ATATATATAG GGACCATATG CATATGAMGG CCGGGGGTTA  
 AATAAAACGA AATCTACTTG TACATACTTT ATGGGATTCC TGCAGCCCGG GGGGATCCAC TAGTTCTT

SEQ ID NO:84: (Length of Sequence = 313 Nucleotides)

CTTTAACTTA ATGGCAATTA AACTCACTG GCAAAAAAA TCACTAGAGA TGTCACTCCA TTATCTTACC AAATAGTGTA  
 TTTTACCAT CTTTACCTA CACCCTGAG TAAGGTGGAA TAGGTTAAAG TTACTGGCAT AATAACACTT CATTGAATTC  
 ATGATAGTAT TTAACATGTT AAACTGTTT AGTTGAAAAG TTCACATGCA ATTTATAATT TAAAAATATG CTACATATAT  
 TTCATAAAW TACAATAGGT CATACTARAC TTTGACTAAA ATTAAGAATG TKTTCTKTC ATAATAATGC AGG

SEQ ID NO:85: (Length of Sequence = 303 Nucleotides)

TGCTCCGTTT ATTGCTCTAT TCAATGACCA CGAGCGAATT ATAAAAAGAC ACCAAATGTC TCTGTCTGCC GTGGGATAAA  
 TATTTAAAGT CAGCAATAAA GTCACGIGGC TCCAAGRTAA TACATGTTGC CAAAGAGTCA TGCAATGCCCT CCTGATGGGC  
 TCTCAACACA CGTATGGWCA TGGGAACACA CGCAGAGCAA CACGCAATAT GAACITSTGG GAAGGCITTA CCACAGTGAC  
 ACAGTAAAT GTCTCACGTA GATCTGRGCT GAGTCCCCAC CCAAACCTTG AGCTCCCTT CCA

SEQ ID NO:86: (Length of Sequence = 380 Nucleotides)

AAAACAAACC AGCTTTAATA CCAATATAGT TCTCTCTTAA ATACCGTGT TCCAGGACA AATGCAGGGG CAGGCTCTTG  
 GCAGAAAGAG TAGAAAGGAA ATGTGGAACA AAATGGAATG GATGCCCCAG GCCCAGGGTC CCTGCCTTGG GCACTAGGGA  
 CTGGGCTGCC TCGGGGATGG GGGAGTGACA GCAGTCCCC CTGGTCCAGT TATTGCAGAG GCGTCGGGG CTCCCTCCC

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TCCCCAGGCC TGAAACATTT CTCAGGATTA CTCTGACCT TCAGCCCCAG CAGGGCCAGG GCCTGGGCTC CTCTGGTCTA  
GGATGGGCCC CTTTGCCCA AAGGGCCTTC AGCTAAGGCG TTGGGTGGG CGGGGAGCCC

SEQ ID NO:87: (Length of Sequence = 280 Nucleotides)

GCCTTTGCTG CTTATTCGCA TCGATGGTGA AAGAGATGTC AGGAGCACTT CTCTGCTGAG GTGGCTGAGA CGAAGAGGAC  
TCCTGCTGCCA GCCTTGCCGC ATACCTGGCA ATTAGCCTGT GTTCTTCATC AAGCCGGTTT GAACCTCTCA GCATGCTCCT  
GGTAATAAAA GGACTTCCTG AGGAGGGAAC AGAGTGNGAG AACAGGGTGT CGTTCATGCT GGTACAGGT CTGGGAGGCA  
CGATGTGAGC CAAGTTGAGT GGCTTCTCAG GCTGATCTGG

SEQ ID NO:88: (Length of Sequence = 446 Nucleotides)

CCTGCGTCTC TTACACCCYC TCCCACCCGA GGCTCCCCAG AGATAGCAGA GAATTCGAAG AGGTGCGCGG GGACTGGAAA  
GAAGTCCCGN NAGGCGCCCT TCGCAGTCTA CCCCCAGCC TGCTTCCAG CCTACAYCCA GACCCAGCTC AGACCTTCGT  
GACCACCCCA TCCCTTCTC CGGCTGGCTG GTTGGGGGC ATCCCTCTCT GTGCTGGCT TCCAGAGGCA GGACAGGCCT  
CCTGGTAAGC CCGCAAAGTT GCTGACCTCC TGACTTCGTC TGCCCTTTAT TAATATCTGT ATTGCTGATA ACCGTGCTCT  
TGACTATGTG TCCCAGGTCA TGTCACAGGT CATGGAGAAG CCCGTGCCAC AGTGACCCCT CCCATACCTC TGGGGGGGCT  
GCTCTCCATC TGGATCGTAG GAGGATATAG GTGTGTTCTG GACCAT

SEQ ID NO:89: (Length of Sequence = 384 Nucleotides)

GTCCCTTCCTG GGGACTCTRT TTCCCCATTT ATTGCTGCTG TGTCCTINAC CAGTTCCTTG CAGGATTCCC TCCTTTTAAA  
ATGCCCTTAA ATCTAGCTTT GCCTTGGAGA CCCAGTGGG TGCTGCTCCT GCGTTTTCT TCCTGCCAAG CCTGAATCAA  
TGTTTCATCT CCAACCTCT GCGAGTTTG CCCCTCAAAG CTGTGGTGGT CAAGACTGTW AGCCTGGCAG AGCCGCGNGG  
TGAAGGGAGA AGCTCTTGA GCAGGCAGGA TGCCACCGCT GCTTCAGCTT GCCTCCTCGC CCAGCTACCC TTTGGCCCCA  
TTGGGCCCTC GIMIGCCTCT CCAGATTGT ATGTTTCAAG NCTGTGCTG TGTTCTTTG TCTG

SEQ ID NO:90: (Length of Sequence = 344 Nucleotides)

TCAAGCTGGA AAGGGCTACT ACCTCATGCT GGAAAGGGCT ACTACCTCAA GCTGGAAAGG GCTACTACCT CAAGCTGGAA  
AGGGCTACTA CCTCAAGCTG GAAAGGGCTA CTACCTCAAG CTGGAAAGAG CTACTACCTC AAGCTGGAAA GGGCTACTAC  
CTCATGCTGG AAAGGGCTAC TACCTCAAGC TGGAAAGAGC TACTACCTCA AGCTGGAAAG GGCTACTACC TCAAGCTGGA  
AAGGGCTACT ACCTCAAGCT GGAAAGAGCT ACTACCTCCA AGCTGGAAAG GGCTACTACC TCATGCTGGG AAAGGGCTAC  
TACCTCAAGC TGGACAGGGC TACT

SEQ ID NO:91: (Length of Sequence = 364 Nucleotides)

GCCCCAGGGT GAGGGCTATG AGGGGTCAGG GGTCAAGTTC CCCAGGACCC TAGTCCTTGT CCCCTTCCCT GTTGCTAAAT  
AAAAGTGAAT AAATACTAAA TAAATACAAC TGGGGCCAG GCCCTCCCTG CCTTCCCCCT CCCTCCTGTG ACCCGCAGCA  
GAGGGGGCAG TTTAGATGGA GGGCTGTCTG TCAGCCCCCT CCATCCACTA ACCCATCACT GCCTCCAGG GCAGGAAACC  
AGGGCAGGGC CAGCTTGGC ATTAGGGCAG AGAGGAGGGG CAGGTCTCAC GCCACAGCC CCTTCCACT TGAGTCTTAG  
CATGAGGCAG CAACAGAAGC TCTCTTTCC TCCCAGCTAA GTCC

SEQ ID NO:92: (Length of Sequence = 218 Nucleotides)

ATTTAATAGA AAATTAAT AATAATAAT ATGAAACAGA CTGATAACGC TGAGCTGGGC AGGCCAGGC CAGTCTAGTA  
CAAAGTTAAG GAGGTAGGGA GGATGGTGGG GAGGAGGGG CGGACTACCC TGCAGGACGC GGGAGGCTGC TCAGACTGTG  
GTGATGTCAG GAAGGGCCGC ACACTTTGGC ATGGACGATG CACTAAAAA AGAGAAAG

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SEQ ID NO:93: (Length of Sequence = 364 Nucleotides)

GCTTTCAAGG GAACAAAGAA TGGCCTGGC AGTGCCCTGG AGAAGGAGGT GGAGAGCATG GGGGCCCATC TTAATGCCTA  
 CAGNACCCGG GAGCACACAG CTTACTACAT CAAGGCGCTG TCCAAGGATC TGCCGAAAGC TGTGGAGCTC CTGGGTGACA  
 TTGTGCAGAA CTGTAGTCTG GAAGACTCAC AGATTGAGAA GGAACGTGAT GTGATCCTGC GGGAGATGCA GGAGAATGAT  
 GCATCTATGC GAGATGTGGT CTTAACTAC CTGCATGCCA CAGCATTCCA GGGGCACACC TCTAGCCCAG GCTTTGGAGG  
 GGCCCACTGA GAATGTCAGG AAGCTGTCTC GTGCAGACTT GACC

SEQ ID NO:94: (Length of Sequence = 423 Nucleotides)

CTTCATACTA GAACTGTCTG CCATCTTTAT TTCTTTGTTT TCAGGAAAT TGGAGAGAAA AGTATTTCTT TTTTAAAAAT  
 GATTATTATA CTTTAAAGTTT TGGGATACAT GTGCAGAACG TGCACGTTTG TTACATAAGT ATACACGTGC CATGGTGGTT  
 TGCTGCACCC ATCAACCCGT CATCTACATT AGGTATTTCT CCTAATGCTA TCCCTCCCCT AGCCCCCAC CCTCCAACAG  
 GCTCCAGTGT GTGATGTTCC CCTCCCTGTG TCCATGTGTT CTCATGTGTC AACTCCCCT TATGAGTGAG GGACATGCAG  
 TGTTTGATTT TCTGTCTCTG TGTTACTTTG CTGAGAATGA TGGCTCCAG ATTCTCCAT GTCTTGCAA AGGCATGAAC  
 TCATCCITTT TATGGCTGCA TAG

SEQ ID NO:95: (Length of Sequence = 405 Nucleotides)

AACAGCCCC GATCTGCATA GCGTGTGAAA GGGCAGGGG ACATCAGTAA CCTCTGCAG CCACCATCCA ATGCCATTAC  
 TGINAAGTGA GACTTGGCCA CTGTAGCCTG GGCCTGCTGC AGGAGCTCTT CAGAAAGGCA CATGAGGACC ACGGTTTGCC  
 TCAGTTTCTG GTAAAACACA AGGTCTGGAG TGCCCTGCA AAGGGTATG ATGGACTTCC TGCCAGTGAC AGAGCATGTC  
 TATTGCAAAC AATTCTCTCA GTTACGTTCA GCACCTAAGA ACGGCTAATG NCAATAGGAT CTTTAGCAAC TTTTTCACAT  
 CATAGAAGGT GCAATCGCTC ACTTGGGAAC ACTACTGAGA GTGACTTCTC TTTTAAAATT GAGTAGCAGA TGAAAATTA  
 AAATT

SEQ ID NO:96: (Length of Sequence = 173 Nucleotides)

GAAGACAATA CTGATGCCAG CTCFTTGIAA TTGTGAAATC TGTACCCAAA CCTCTGGATT AGAATCTCCA GTTGTCTACT  
 GTAAATACTG GAATTACAGC AAAGGATATG GGGACTGGG TGCTTTTCTG TATTGTACAA GCACTATTCT AGATATTAA  
 GAAATTTAAC CGC

SEQ ID NO:97: (Length of Sequence = 337 Nucleotides)

ATGGCGCCCT ACAGCCTACT GGTGACTCGG CTGCAGAAAG CTCTGGGTGT GCGGCAGTAC CATGTGGCCT CAGTCTGTG  
 CCAACGGGCC AAGGTGGCGA TGAGCCANTT TGAGCCCAAC GAGTACATCC ATTATGACCT GCTAGAGAAG AACATTAAAC  
 TTGTTGCAA ACGACTGAAC CGGCGCTGA CCTCTCGGA GAAGNTGTG TATGGACACC TGGATGACCC CGCCAGCCAG  
 GAAATTGAGC GAGGCAAGTC GTACCTGCGG CTGCGGCGG ACCGTGTGGC CATGCAGGAT GCGACGGSCC AGATTGGCCA  
 TGCTCCAGTT CATCAAG

SEQ ID NO:98: (Length of Sequence = 212 Nucleotides)

TGAAGCCCAA GNAGTNTGTG AAGACAGAGA ATGACCACAT CAACCTGAAG GTGGCGGGC AGGACGGCTC CGTGGTGCAG  
 TTCAAGATCA AGAGGCACAC GCGCTGAGC AAGCTGATGA AGGCCTACTG AGAGAGGCAG GGCTTKTCAA KGAGGCAGAT  
 CAGATTGAGK TTCGACGGGC AGCCAATCAG TGAACTGAC ACTCCAGCAC AG

SEQ ID NO:99: (Length of Sequence = 26 Nucleotides)

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CCTTTTAATA ATAATTCTGC TGTCGCTGT GTACTAGAAC CCATGCCTAC TGCTTGGGGT ATAATGTAGT AAATGTAGTA  
 AAAACAATAT CCGCGGGGCG CGGTGGCTCA CGCCTGTAAT TCCAGCACTT TGGGAGGCCA AGGAGGGGCG ATCACGAGGT  
 CAGGAGAGCG AGACCATCCT GGCTAACATG GTGAAACCCC GTCTCTACTA AAAATACCAA AAATTAGCCA GCGTGGTGA  
 TGGACGCTG TAGTCCCAGC TACTC

SEQ ID NO:100: (Length of Sequence = 333 Nucleotides)

AAAATGCTCA CAGTGGTCTT CTCTGGCCGG TGAGCCTACA GCTGATCTTG TCAGAGACAA ACGTTAGTTT TACTGAGTCA  
 CCCAGAGCCC TGTCGTGGTG CCTGAGGGTT TGTTCCATGG GACAGTCTCC ACAATTCCTC TGGGGAAGGG CCACAAATCC  
 CACAGTGTGT CCCAAGAGGG CTGGAGTAGG CGGAGTCCCC AGCAGCTGTG GCATGACCAG CCATCTCTCT CAAAACAATT  
 GTTAACAAGC CTCTGCAAG TTAAGGTTCC ACATGGTAGC CGTGGTACAG AGGCATTTCT CTAGGGTGGG AGAGGCTTGT  
 GCTCTACACC AGG

SEQ ID NO:101: (Length of Sequence = 156 Nucleotides)

CTCTGACTTT CCGTGGNIT TAGAGCCAAG CTCAAGGTAG TAGGCGTAG GGNCTTATTT TATTTTCAAA CCCCCATCCT  
 CAGAGCGCAG ATACATGCAG AGGCTTCTGC CAGGCTACCA CGGGGCTTA GTGGGAACAG GTTGAGACCA GCACTT

SEQ ID NO:102: (Length of Sequence = 331 Nucleotides)

CGAAAAGGGG NNNTATGGCC ATCTTTTATC AGAAAAGTG ACAAACGGG AATTAAAAA ATGAATTTTC NNICTGACTT  
 TATTINNAAA TACACTTTCT TTTTINNAAA ACCAATACAC TTTCTTTGAG GATGACAGTA TTAGGAAATC CAATTNNACA  
 AAAAATACTA CATCTAGTCT GGGGTAGATA TATTTATTTT TGTTAACATA CATTAAGTGG CACTAATTAC ACAGTAACTA  
 TAAGGTAACT AACATGAAAC CACAGAACTG TAACTCTGCC ACAGCTGCAT GAACCTGGGC TTTTCTGGTT GAGCCCATTT  
 TCAAAAACT G

SEQ ID NO:103: (Length of Sequence = 316 Nucleotides)

AGCCACTGCG CCCACCCCA TTTOGGTGIN ANCTCAGCTC ACTTCAACCT ACCCTCCCA AGTCAAGTG ATTCTCCTAC  
 CTCAGCCTCT TGAGTAGCTG GGATTACAGG GGTCTGCCAC CACGCTGGGT GATTTTCCCTA TTTTATGTTG ACACTGCATT  
 TCACCAGGTT GGCCAGGCTG GTGTGAACT CCTGACCTCA GCTGATCCAC CCGTCTGGG GTCCCAAAGT GTTGGGATTA  
 CAGGTGTGAG CCACCACACC AGGCCATAT TTTCTTTTAG ACATGCAGGC AATGTGGTG GGTGTGCTG TTAAGA

SEQ ID NO:104: (Length of Sequence = 308 Nucleotides)

GTTTTTCTG CATCTATTGA GATAATCATG TGGTTTTTGT ATTTGGCTCT GTTTATATGC TGGATTACAT TTATTGATTT  
 GCGTATATTG AACCAGCCTT GCATCCCAGG GATGANGCCC ACTNGATCAT GGTCGATAAG CTTTTTGATG TGCTGCTGGA  
 TTGTTTTGTC CAGTATTTTA TTGAGGATTT TTGCATCAAT GTTCATCAAG GATATTGGNC TAAAAGTGTG CTGTATTGAG  
 GAAACCCATC TCACGTGCAG AGACACACAT AGGCTCAAAA TAAAGGGATG GAGGAAGATC TACCAAGC

SEQ ID NO:105: (Length of Sequence = 355 Nucleotides)

GGCCTTCCCTC AATATGTAGG CGCCACTTTT TCTCCCTGTG CCCTCACCTG GTCACCCCTC TGTGCGCGAN ATCCCACTGT  
 CTCTCTGGGT GTCCAAACTT CCTCTCTTGA GGAGGACACA AGTCAGATTG GATTAGGGCC CACCCCAATG GCCTCATTTT  
 AACTTAATCA CCTCCCTTTT GTTTGGGCTT TTTAACTTAA TCACCTCTTT AAAGACCTTA TCTCCAATA AGGTTTCATT  
 CTGAGGTATA CTGGAGGTTA AGACTTTAAA ACACGAATTT GGAGGGGACG TAATTCAGCC CATAACAATA ACAATAATGA  
 CATCTTACAA CTTACTGCCA CCACCAAGCT TGCTG

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SEQ ID NO:106: (Length of Sequence = 355 Nucleotides)

GGATGAGGTC GCGGGATCG TGGCTGCAGG CCACTGCAAG ACCAATCATG TCACAGCTTC CGTGGACGCC ATTAATTTTC  
ATGACAAGAT CAGAAAAGGC TGGTTCATCA CCATCTCGGG ACGCATGACC TTCACGAGCA ATAAGTCCAT GGAGATCGAG  
GTGTGTGGTG ACGCCGACCC TGTGTGGAC AGCTCTCAGA AGCGTACCG GCGCGCCAGT GCCTTCTTCA CCTACGTGTC  
GCTGAGCCAG GAAGGCAGGT CGCTGCCCTGT GCGCCAGTGT GTGCCCGAGA CCGAGGACGA GAAGAAGCGC TTTTAGGAAG  
GCAAAGGGCG GTACCTGCAG ATGAAGGCGA GGGAC

SEQ ID NO:107: (Length of Sequence = 273 Nucleotides)

GTGTCTCTTT TAAAGAAAAC ATACTTTTAT TTGGTCTAAA TTGTGAAAAT ACCCAAAACA TTGATAGAA ATTGAACCTT  
GTCAACAGTG TTATTTATAC TAAGATCAGG ACAGTTCCTT GAGATCATAC TGTTTATTTA CTAAGTTTGG CCTTTGTTTT  
ACAAATGTAA TGTTCATATT TATTTGAATT TTAAGATTGG TTAAATGTTA ATGAAAAGCA ATCCAATTGT TANTTTTTAG  
TAGTGCCCTT TCTCTGTATG CCTTAATTTT ATT

SEQ ID NO:108: (Length of Sequence = 359 Nucleotides)

ATTTTATTTT CTTACATCGA AGAAAATGTT AAAGAGTATC TGCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT  
CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCACCTG GATGGGGCTG TTCCTATCCC TGCAGCATCT GGAATGGAG  
TGGATGATCT GCAACAGATG ATCCAGGCGG TGGTAGATAA TGTGTCTGCG CAGATGTCCC TGGTTCGAAA GACCACTGCA  
CTCAACAGC TGCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTCTTTTG CAGATGTAGT  
TCCAGCAGTC AGGTAAGTGG AGAGAGGCGG GGATGAAGG

SEQ ID NO:109: (Length of Sequence = 360 Nucleotides)

TTTATNAAAG CAGTTAAACT TAGCAITAAA TAACACTCTT TAAATGGTAC ACCTATGAAG CAAGAGTTAA ATATAAACCC  
AGTCTAATCC TGTACACTTG TGATTAAATG TGACAATCTT AAGTTGCTCA CTCTTTTCCC ATTTACCAAT TCAGAGAAAG  
CCCGTTTCTT GTTTTCTCCT CACCACTTTG CCTTGGCATC ACACCAACCC TGCCTGGGGC TTCAGCTGCA GATCCTCCCC  
AGCCCCCTCT CCCAGCTGGG CTGACTCCAG TCCCAGCCCC AGTCTCCACC AACTGAGCAG CGTACGCAAG GTTGTGTCTG  
GCTTCCAGCA TCTACCAACC CTTAGAGCA ACTT

SEQ ID NO:110: (Length of Sequence = 364 Nucleotides)

TCTCAGAGGG GCTCTGGGGG TCATTCAAGG GGGACTTCTA GCTTCTCTCT GGAACCCCTT GTCCAGAGCA AAGCCAGGT  
TCCAAGGTCC CCACGCAAG GCTGTGGGT GCTGGCAGCA AGAGGTACAC AGCAGTTCTC CCAGCTCACA GCAGTGACCT  
CAGATCTCCA GCAGCAAGGG CGCACTCTC GTGCCACAA GGGCCTTGCA GAAATNCTCC GGTCCCTGGG NCTCCCCCGG  
CAGGAGGGGC GGGGCTCTG CCTGCAGTGA GGCCACAGCA CTAAGCGGCT TCAGTCACAT GCTTTTCAGG TGAATCACTC  
CAAATTCAGT GAGGAGGGCC ACGACAAGGA AGTTCAGGTA GAAG

SEQ ID NO:111: (Length of Sequence = 455 Nucleotides)

TTTTTTTTTT TATATTTTAA ATGGAATTTA TTCTATCAAC TGCCTGAGAG GACACAATGG GGGAGGGGCT TCGGACCACA  
GCAGGAGCCC CGACTGCCCA CCTGAGGGCA GGGAGAGCCT GACCCCATTTG GCCCAGGCC TGGCTCTGTA ACCATTAACC  
TCTTCCCCCA ACTAACACCA ATGAAAACAC CATTCCACGT GACTGGGCTG TGTGTTTGCC TCTGTGACAT GGGGACCCCT  
GACCCTAGGG GTCTCGCCTG AGCCAGACCT GAGGGACCCA CCGCGTAGG ATGGAGGAAG GTTTAGGCC CTCTTTTGCC  
AGCCAACGCC GGGGGTGGG GCAGACCTG GGAGTGGGCC TTACAGACCA GCCACAGGTA TTTCTTAGGC AATTGACAC  
ATTTTATTAC AAAACCAATC TACATTCATT CCTAAAAGGG TCATTTTCAG TAAAA

SEQ ID NO:112: (Length of Sequence = 398 Nucleotides)

CTGATCTGAC AGGAGGTGTA GGTGAGGCAG TAATGGAAGT SATGGGGAAC AGCTGTAAAT ACAGATAAAG CTTTACTCAC  
TCGCCACCCC ACTGCTCATC TCCTGCTGTA CTGCCAGTT CTTAACAGAC AGCAGACAGC TACTGGTCTG TSGCCCAAGG  
GTTGGGGACC CCTGACATAG ACTAAACAAT TCACAATGTT TATATTAAAC AACTTATTCC AAGTTTCCAT TTTAGACTCT  
GGAACATCTG ACATGGTGAA TCACAGGTA GTAAATSGGA AGGGAGATAA CAGACAACTT GACGGCCGTG GAAGACGCAC  
TGGGCGGGCA CTGGTGAOGG GTCTCGGGAC AGACTTCACA TCTCCAGACT GGCACAGTGG GCTCACACCT GCCTCCCA

SEQ ID NO:113: (Length of Sequence = 444 Nucleotides)

ATCAGTGTC A GTGCTAACA GAAGGGTCTG TTAAGGATGC TTCGTATTTA ACCAAAAGAT TAAGCTTCAG AAACAATCTA  
ACATACTCAA AGGAGCACCA AATTATCAAC CGGCTACAAG GATGCAAAGG ACCTAAACAA CAGATGTCAA AGGGCTTGTA  
AAAACGGAG CCAGCAACCA TTCCACTTGA AGGAATCCAT CTCAGGGAAA TGCTGGAATC CACACACAAA AGCAGGTGTG  
CAAATAATCA CTGCAGCAG CCTTCTAATA GTGAACAACA GAGGCAATCC AAATATCCIT CAACAGGGAA CTGAGTAAAT  
ACCAACTATG GGCATATCCA CATAAGGCTC TCTGCAGTCA TTAAAAAGGA TTGCACTTAC ATGCATGTCT GCCATGGAGG  
TCTTTCAGGC CAATGGTTCC ACTCGGAAGG GCAACCACCA ATTA

SEQ ID NO:114: (Length of Sequence = 472 Nucleotides)

TOGGGCCCCA ACGGAGACCT GGGGATGCOG GTGGAGGCGG GAGCGGAAGG CGAGGAGGAC GGCTTCGGGG AAGCAGAATA  
CGCTGCCATC AACTCCATGC TGGACCAGAT CAACTCCTGT CTGGACCACC TGGAGGAGAA GAATGACCAC CTCACGNC  
GCCTCCAGGA GCTGCTGGAG TCCAACCGGC AGACACGCCT GGAGTTCCAG CAGCAGCTCG GGGAGGCCCC CAGTGATGCC  
AGCCCCTAGG CTCCAAGAGC CCCCACCGG GACCCAACCC TGCCCTCCCTG GGGCTAAGCT CTGGCCTGGG GCACTCACCC  
CCTGGCTTAG ACAACTTCTC AAGGGCTTGG CCTTCAGGGG ACCCTTGTGG GTCTTGCCIT GCTGGGGCCA CCTTTTCTTG  
CTTGGGGCTT CCCCTTTGGC CTACCTTGGG GCCAAGCCCC TACCAACTTT GGATTGCCTT CTGGGGGGCC AA

SEQ ID NO:115: (Length of Sequence = 293 Nucleotides)

CTNGGGGCCA TGTGGCTGAT TTCCATCACC TTCCTTCCAT TKGCTACGGC GACATGGTGC CCCACACCTA CTGCGGGAAG  
GGTGTGTGCC TKCTCACTGG CATCATGAGA GCTGGCTTTA CCGCGCTCGT GGTGGCTGTG GTRGCTCRCA AGCTGGAGCT  
CACCAAGGCT GAGAAGCAG TGCACAACCT CATGATTGAC ACTCAGCTCA CCAAGCGGGT AAAAAACGAG GCTGCTAACG  
TTCTCAGGGA GACGTGGCT CATCTACAAA CATACCAGAG CTGGTGAAAG AAG

SEQ ID NO:116: (Length of Sequence = 448 Nucleotides)

TTTGAAAATT TAGAGGATAT TTATTCTCA GGAAGGTGCA CAACAGCTGG CAGGCACTGC TTCCCTGCT CTAGGGGATT  
CCTCTCTCCT TTCCAAGAA ATCCCTCTC TTCTTAGAAG TGCCCATGGG AGGCTGGGAT GTGAAAAGAA ACCATACACA  
ACACTCCAGA GCCTTAAAAA AATAAAGCAA CAACCTCTC CACACGAATA CACTTACAAA ATAAATAGAC GGATAAAGA  
GAGGCCACGT GCCTCCCATC CCGGCTGTAG GGCTGCTTGG GGATAGTGGG GCTGGGTGGC TCGGTCCAC TTCTCCACG  
CAGGATGATC CAAAGGCTAA ATGGGATGGA AGGGCCCTGG CTTCAGAGA GAGGGTGGGG CAGGCTCTC CTGGTACTCA  
GCAGGGAGGA CACTGGGGCA CGGTAGGGG TCCAAGGGCC ACTTAATA

SEQ ID NO:117: (Length of Sequence = 551 Nucleotides)

GAGACGGAGG CTCGCTCTGT CCCCCAGGCT GGAGTGCAGT GGCGAGATCT CAGCTCACTG CAAGCTCCGC CTCCCGGGTT  
CAGGCCATTG TCCTGCCTCA GCCTCCGAG TAGCTGGGAG CCAGCGCGCC CAGCCTAAAA AACTTTTCAA GTCAATATTA  
CTACGATTTA ACATTAGAGT GTGGACATGT GATTTAATCG CTATAGCTAA AATACGTCAA ATATACGTTG TCATGTGCTT  
GAACATGATG CTAACCTGA CAGGATGAAG GAAAGTAATA TTCTTTCAGT GTAGTTCAGG AGAGCATTTG TTTTCTTTTC

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TACCAATTAA CCCATCATTG CTTTTAAACA ACCATCTGAA GGAGCAGAGA GGCAGGGTAG AAGACAGAAG GGGGTCTATG  
TGGGTACTAA AGATGTTTCT GTTTTGTAAT ATTGTGTGTG TGTGGGTTTA TGGTTTGCTT AAGGGATCAA AACCTGGAAA  
AAATGGGATT CCAGGAATGG CTCTGTTATT TTTGCTGGGT TCCAGCTTGT AATGCCTACT GCGTTGGTTC A

SEQ ID NO:118: (Length of Sequence = 426 Nucleotides)

CCCCACCCA AAATCAAAAC TGAAGGTAGT GTCAGTGTAT ATATGNGTC CCTGTGTCTG AAAGTCAAAG CAGCTTCATT  
TTGGGGCCTC AAGAGCTCCA GCTCTGGGCT CTTACCTCT AAGCCCATGG GCAGTGCCCG CCCAGTGGTG TGTATAGATC  
GGAGGCTGAG GGCCTCACCC TTAGCTGAGC TGTGCGTGC TGGGGAGCCT GTGCAGGAGG GTACAAGTAG GAAAGTGCCA  
TCTGCATGGG AAGAAAAATG CAGCGTCCTT GGTAGTGGG ATGGGGTCCA GGAGACCCAG GGAGCTTGCC CAGAGGGACC  
TGAGTGGCAT TCCTGTAGGA AAGCAGCCCA GATCTTGGG CCGTAACGGA TGTCTGGAA GTTTTGACTT TGAACCACCA  
GGTCCCATG TTAACAAGCT TCTGA

SEQ ID NO:119: (Length of Sequence = 434 Nucleotides)

TTTTTCGGTT AAAAAGGCC AAAACTTTAT TTAGTTTTCA GGGAAATATA AGATGCATGT AAACATAAAA TACAAAACAA  
AACCCAAATC TTACAGTCTA GAAGCATGCC AAGACAGAGC ATTTTCTGCA GACCAAGAG TCCCGTCAA GTGATAAAGG  
ACACCTGGAA AGTGGCAGGC CAAGGGGCTG GTCCCTTCCC CAAGGGCACT GCATTTTGT GATGAGATTA AAAACAAACC  
AACTCCACTA TTAATAATGC TAGAAACATG GGATAGTTTA GCACCAACAT TGATTCTGGC AAATATTICA GCACTCACAT  
CGACTGCACT GAGTTTAATG TCCTTCTCC AGTTTCTCTG CTGAGTAGG AAGGAGGGAA ACCTGGGGGG AAGGGGCTCC  
TCCTGACCCC ACAGGGCCAC TAGGAGCTTG GAGG

SEQ ID NO:120: (Length of Sequence = 276 Nucleotides)

AGGAAGTGTT AGCAAATGCT ACCATGTGGA AACTCAACT TTATTGCTT TATTTATATA TTAAACAATT CTAAAGTATT  
TACTTCTTGC TTGACAAA AATGAAAAT ATAGGGGCAC TGACTGACTC CTCTTTAGGA GAAAAGGGTT ATATGTACAG  
CTATGGAGAG TTACGGTTCC CCTTTAACA AAGGCAAATA TTAATAAAA AGGGCTTCAT CGGTCAAAA AGGGCTAAGA  
GCTCAAGCA TTTATTACA CTGTACATCG GGCCCC

SEQ ID NO:121: (Length of Sequence = 554 Nucleotides)

ATTTCTTTCC TTAATCATAT CTGATGCTGG GATGTGGTA ACCCCAACT GAAGGCAGCT GCTAAATCTC AAATGCTAAA  
AAAATACTGC AATTITGACA TCAGTGAGTC AGATCAATAC ATCCTCTGGG GCTGATTTTG CTTACAGTT AGSATGAGCC  
ATCTCTTAAG CTGCAGGCTC AAATGGGATT AACTGAATC TATACCTGGG ATGGGCCATG GACTGAGCTG TCCATGCAGA  
AGGACCAGGC TGTCCATGCC TTCCCTGCCC TTTTACTCAC CACTGCACAG CAGCCCCAGT GGGCCTACTG CACATGTCTA  
GGAGAAATCA CTCTAAGAAA ACCAACAGGA ACAGGCTTTA GGCAACAAGA GACGTCTCAC TGCATCTCCT CCCAGCTCAG  
AACTTGAGTA CTGGGTCTTT GCAGCTCAGA GCATTCTCTC CTTCCTTTC CTGCCCCGAAA GGCTGCTCTT TTCTGAGAC  
ATATGGCACT CCATGCTGCA AGTTTCAAGC AGATGCAGGT TCTTATGGG CTTTTTGCTC AAAGAGCTTT GGT

SEQ ID NO:122: (Length of Sequence = 238 Nucleotides)

CACCTAAGCA GGTAGACATC CGCAAAGTCA GATGCTTTCC AACATGACAC CTGAACATCT TCCTTTATGC AACACCCAAA  
CATCTTGGCA TCCCCACCCC AGGAAGTGGG GGGAGGAGT TATGATCCCT GGGCGCTTCG GCAGAATGGA GAGCTGAGGT  
GTCCCTCCCC TGCTAGTCAC CTACCAGGTG TCTGAGCAGC TGATGCTCC CTGGCTCAAG TGGGCACTGT ACCTTTTG

SEQ ID NO:123: (Length of Sequence = 244 Nucleotides)



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ATCCAGGCTT TCATTTCTAG CCAACCTCA AACACCACCA ACTACAAAGA AAATTTAAAA GTCTAATTTG TAACCTTCAG  
 ATAAGTATAA ATTAGTTTT TCTAGGCTTT CATTTATTGG CTCTTATAC AATCTATCTT GTAAAGTACA TTCCCTTAAA  
 TTACATTAT CTAATAATTA GGCTAAGCAT TATTTAAATC ANTTAATCAT ACAATATTTT ATGGCAATAT GCACATATTT  
 ATAA

SEQ ID NO:124: (Length of Sequence = 330 Nucleotides)

CTCAGOGTAT CATAGGCGTG CTCACCTCC TCCCCAGCT CCGCCCCGC AGGCAGGTGG TGTAGGATAG AGTGGTGCAT  
 GAAAGGGGGG AAGCCCGAGG GGCCCGCTGG GAAGGGTGCT GCCCCGTAAA GGGCATCCCA CTGGCACTGT GCCTCANCTG  
 COGCTTTCTG CTTAGCTCA GCCAGTGGCC GCGCTGCTC TTCAATCACT TGTGTCCCT TCTGTGCAG AGCTAGTTGG  
 CGCTTTGGTC TCGATGTCT GCAGTGTGGC TGCCAGGTG CAAGGAAGGC TGCCCGTGC CATTCTGGGG GTGAGTAGGA  
 GCGCTCTTTT

SEQ ID NO:125: (Length of Sequence = 281 Nucleotides)

CCTCTCTCCC TTGGGTCTC CATTTACGA GCCACAGTAT TTCTTAAAGC TCGTTGGCAG CCTGCACCCT GCTTATCTT  
 GGGAGACAG AGTTTGATC CTATTACAAC CCATAGTTTT TGCATAACCA TGGTGAGAGG AACCATCCTT CCCAATCCCA  
 ACCTCAACCA AAGCTTAGAA AAAGTGCCAT CNTTAACCTT TCAGAATCAC TCATAAGTAA ATCCTATAGC AGTCTCTGCT  
 AATGCAAATT TCAATGTGTG CCGCTTATT AGGTGACTTT T

SEQ ID NO:126: (Length of Sequence = 266 Nucleotides)

CTTTAATGA TGTGGTCTG GTGGGATTA TAAAGGGAGA TGGACCCCTG GNAAGATGCT TTCCTMAACC ACAACCCACA  
 CATGGGTCA CCATTTCTC TTCTCTCC TTCTGTGGT GGCCGGAGAC CTGTAGGACC TTCCCTCCCT TTAGGGTTCT  
 GTAAGGCCCC TTTTCAGTC TCAGAGTCCA TTCTCTCTT GTGCTGAGGG CCTGCAGTGG GGACCATATA CTTCTGGTGC  
 TCTTAGTTTG CTGTGCGTCT GTTTTT

SEQ ID NO:127: (Length of Sequence = 435 Nucleotides)

GTCTGGTTCT ATTCATTTG TAGTTGCGAG AAAAGGAATG AACCGTGACT ATGGCAATTC ACCGTGACGT GTGATAATTT  
 AGTTTGCTAT GAGTTTTCAC TCTTAGGTAA AACCTAGTTA TCCTAATTAA TAATTAGTTA TGGATGATAT AGTAATTTTT  
 TTTTTTTT ACTGCGTCTC ACTGTCAATC GGGCTGGAGT ACAGTGGCTG ATCAGATTC GGTGCAGCCT CGACCTCCCT  
 GGGCTCAGTG ATTCTCTGC CTCAGCTTCC CAAGTGGCTG GGGATTATGG GCATGCACCA TCAATGTCTG GCTAATGTTT  
 GGIGTGTITT TTTATAAAGC CAAGGGTTTT GCCCATGNTT CAAGACCCCG GGGCTGGTCC TTGAACCTCT TTGGGGCTTC  
 AGGCAAGTCC TCCACCTTC GGGCTTCCC AAAGT

SEQ ID NO:128: (Length of Sequence = 471 Nucleotides)

TTCCCTTCCC AAGGACTCGA CTTGAGAACC GCCATGTACT CGGAGATCCA GAGGGAGCGG GCAGACATTC GGGGCTTGAT  
 GGCCCGGCCA GAATACAGAG AGTGGGAATCC GGAGCTCATC AAGCCCAAGA AGCTGCTGAA CCGCTGAAG GCCTCTCGGA  
 GTCACCAGGA GCTCCACCGG GAGCTGCTCA TGAACACAG AAGGGGCCTT GGTGTGGACA GCAAGCCAGA GCTGCAGCGT  
 GTCTTAGAGC ACCGCGGCG GAACAGCTC ATCAAGAAGA AGAAGGAGGA GCTGGAAGCC AAAGGGCTG CAGTGCCCTT  
 TTGAGCAGGA GCTGCTGAGA CGGCAGCAGA GGCTGAACCA GCTGGAAAA CCACAGAGA AGGAAGAGGT TCACGCCCCC  
 GAGTTTATTA AGTCAAGGA AACCTTCGGA GATTTCACA CTGACCAGCG AGAGAGAGAG CTTTAGGGCC A

SEQ ID NO:129: (Length of Sequence = 186 Nucleotides)

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GCCTTTAAACA TCCCTGCGCA ATRACTGGCC TCAAATCACC AGTGGAACTT TTTCAAAAAA TACACCATTTG GCTCTATGTA  
 GTTCTACTGA TCTRAAATAT CCACGTGTGG GCCAGGAGCA CTGGCTCATG CCTGTAATCC CAGCATCTTG GGAGAGCGAG  
 GAAGGAGGAT CATTTRAGCC CAGGAG

SEQ ID NO:130: (Length of Sequence = 307 Nucleotides)

ATAAAATACT TAGGAATATA CCTAACCAAG AAGGTGAAAA ACCTCTCCAA GGAAACTAT GAAACTCTGC TGAAAGAAAT  
 CATAGACTAC ACAAATACAT TTCATGCTCA AGGATGGGTA GAATCAATAT TGTGAAAATG GCCATACTGC CAAAAGGGAT  
 CTWCAAATTC AACGGTATCC CCATYAAATA CCACCATOMT TCTTTACAGG NITCGGAAAA GGAATTCCTAA AATTCATATG  
 GGACCCAAGA CGGGGGCCGC ATAGCCCATG GCCGGCTTAG SSWAAGGGA CAAATCTGGG AGGCCTT

SEQ ID NO:131: (Length of Sequence = 184 Nucleotides)

CCAGGTGGA TGGAGTGCAA TGGCAGATC TCGGCTCACT TACCTCCC AGGTTCAAGC AATTATCCTG TCTCAGCCTC  
 CTGAGTAGCC GGGATTACAG GCACGTGCCA CCACACCCAG CCAATTTTTG TATTTTTAGT AGAGACGGGG TTTCACCGTG  
 TTAGCCAGGA TGGTCTCAAT CTCC

SEQ ID NO:132: (Length of Sequence = 270 Nucleotides)

GCNGGAGGGC GTCGAGGGCC AGGAGCTATT CTACACGCC GAAATGGCTG ACCCCAAGTC AGAACTMTTC GGNAGACAG  
 CCAGGAGCAT TGAGAGCACC CTGGACGACC TCTTCGGAA TTCAGACGTC AAGAAGGATT TCCGGAGTGT CCGCTTGCGG  
 GACCTGGGGC CCGGCAAATC CTTCGNNNC ATTGTGGATG TCCACTTTAA CCCCACCACA GCCTTCAGGG CACCCGACGT  
 GGCCCGGGCC CTGCTCCGGT AGATCCAGGT

SEQ ID NO:133: (Length of Sequence = 529 Nucleotides)

CTTGCACTAC ATAGCATTGT TATTACTGAT AGCTTTATAA ATCTGCCAAA TAACATAGAA TGTAGCCTCA AAAGGATGGT  
 CGAGGGTTTG CAATCTTTCT TTCTCCACCC AGTGGTGTGG AGCAACTCTG TGCCTTAAAG AGGGCACCAT GGAAAGAAAC  
 AAAAAGGAAT CTCTTTCAA ATGCTGGAAA TTAGGCTTAG CTCACTACTT TCAGGATAAA GACAACTGCA TCTAATTAAG  
 TCCACTCCAC ATTTCTTTGG ACTCTAAGTA TTCTGCACCT GAAGGCTAAA TGAAGTGGC TCAGCCCTAT CTTTTTTGCC  
 ACATCTTTAA TTACAAATCT ATTTCTTCTT CCTTCATTT ACTTCTCTTC TCTTAAGTAA GAAATGTGGG AAATGAGACT  
 GGCAGTTTGG TTTGTTTGCA TGTGGGTGTC CATTAGGCGT CTCATCCTAT GGCCCTTTTT GGAAATGTTG CCTTCTACT  
 ACACACCTGG GAGGTTTCCC CAAGGCTCAA CCTTTTGCT TCAGGTAAA

SEQ ID NO:134: (Length of Sequence = 437 Nucleotides)

GACGGTGGCG ACGCGTGCAC CGGGGATGTG TCCTGCCACC AGAGGAGGTG TGCCTGGCGG GGAGCAGAGG GGCCTTGTGT  
 CCCAGGTGAA GGTGCGGCTT CTTCACCTT AGAGGTGCGT GTGTGGGTGG GGGTGCCTGC TGTGAGGTT TATGCTGTGA  
 ACTGACAGCT GTCCCCCAAG CCATGCTGGC AGTGTGTAGG TGTGCTGCCG GCCACCGCAG AGGAATCCTC TGGGCTTCTG  
 TGGTTCAAGT GGGGCCCAGC GCAGAGCTCC ATGAGTTGCT GAGCAGCCAG CCCTTCAGCA TCTCCTGGGT TTTGGCAGCA  
 GGAGGCGTCC CCTTGTGCAA TTCAGGGGCG CGTGGGGGCT GGGGGCACTC GTAGCAAGGT AAAGGAGCCC CTGCTCAGGC  
 CCTGTGTTGC TCCCCTTTCT TGCAAGAGGG GTAGACG

SEQ ID NO:135: (Length of Sequence = 534 Nucleotides)

GGCATTGTTT TGGTGGGTGT GTCACGCTCC CAGAAGACTG AATTTATGGT AGGATCACTC GCAAGGCCCT GTGAAGGAGT  
 CTTACCTAAA ACAAAGAAA TATCAGGGAC TTTTGTGAC TATTTACAAC TCAGTTTAC ATTTAAATTC AGGCAGTGT  
 AATATGCCAA GGTAGGGAAT GTGCCCTTTT CAGAGTTGGC CAGGAGCTCC TGGCTGGGAC ACGGAGAGGC AGGTGTGGCG

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TAAGGCCTCA CTCCGGGCTG TGAAGGCTC TGATCACACA GAAGCAGCCC TGCCAGCCT GGGTCATTTG CTGTCCGCTT  
 TTCTCTGTGA CCACAAGCAG CCCTGAACAA CCAGTATGTG TCTTCTTTCT CCAGATAGTG AAAAAGGGTG TCCAGATAAA  
 CCCACCTAAG TGAAATGGGC CATCTCTAA ACTGGGGTAC CTCACTGCAC AGGTTCTAGG TAGGCTTTCC ACTTAATCTA  
 ACTTGAGGCC TACAGGTACC CTGTAAAGTT AGTGGGGCTT GTCCTTGATT GTGG

SEQ ID NO:136: (Length of Sequence = 279 Nucleotides)

CAGTTTGAC AAAGTAGCAT AGTGACTTIN TTCTACANT GACTTTCGGA GAAGTINGCA GTTCTGGCA AAGTGACGCT  
 GGGCTGTTTG AAAAAGGCAA GCTTAGCCTA GGCTGCCATC TTAAACATT TCGAGGCTGT AGCTTCCTCA GGATCCTTTG  
 CCTGTGGTCT GGTGGCCGGC AGTGCCCGT CTAACAGCTT TTAACCTGTC ACTTAGTGCC TGAGCACCTA TGGCTGTGAG  
 AGATGCTAGA TACAGAACCC TGTCCTGTAC CACGTGGGG

SEQ ID NO:137: (Length of Sequence = 518 Nucleotides)

CAAATATTTA ATGGAGATCT TCCTGTGTGG TCTGTATATAT GTCTATCCGT TTCGGGGTGG TTTAGGAGAA TCTGTACTAT  
 TTCAGCATGT CCTCCTCCAG CAGCAAAATG AAGAGGAGAA CTAAGTGTG CATTAAAG GTTTGGATTG CACTTTCCCT  
 TCTCTAACAA TATGCGAGTG GCCTCAACTT TTCCATACCA GCATGCATAA TGAATGGGTG CCCAGTGGTC ACTATCTAAC  
 TGGTGTACTG AAAATCTTTC ACTGAGAAGA CGGCTTAGTA ATTCTGAATC TCCTTCACAG GCGCTTCGGT GGAGAGGAAA  
 ATCATCTACC CACTGTGCTT CCTGTCTTC TGTGACTG CTCATGCTTC TCTGCCAGTT TTTCTGTGTT AGGGTATTTG  
 GATTTTGTAG TAGTCTGGAG CTCCTAGACC CAAGTATGGA TTTATTACCC ACTTATCTAC CGATTTGTG TACTGAGGAT  
 CCTATCCAAC AAAGGGGTGA AATCCAGGAT CGCCTTC

SEQ ID NO:138: (Length of Sequence = 266 Nucleotides)

GATTGCAGGC ATGANCCACT GCGCCAGTC GAGTGGTAAT ATGTTMAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA  
 GAGGTAAAA TACTGAGTAG ACCATMCTGT AACAGATGT MCTGTATYC GGGCTTTCAT ATTCCATTGA TAAAGCACAG  
 GCAGAGCTCA GAGTAGATTT AAYGTAACTC TGAAGGGCAC TAGGATTTTC AGAATGGTAA ATAAGCATTG GCTTCACCTT  
 AAATYCAAT CTGCATTGGG CTGTGA

SEQ ID NO:139: (Length of Sequence = 341 Nucleotides)

ACCTCGCTCA CCGCTCTGAC CACCGACAGG CAGAGCAAAG GATGCGGGAG TTGCTCTGTC TGCCCATCTA AGGGGACGTA  
 GGCAGAGAAG CAAAGGCCTC TGCTCTCCCT CCATCCATCC CGGTGTGCTG GCGCCACGG AACAGGAGTC CTTCAACTAT  
 TGCTGCCAG AGACCCAATT TTAGGGACTG TAGTCTGCAT CTGGATGAGC TGGGCTGTAG ATTGAAGTCT CAGAAGCAGG  
 GAAGGTGGA AGGGGTAGGG TCCAGAGCC CATGGAGTTA TTGCTGAGAA GATATGCAGG GGACACATTT CCCAGGGCA  
 GAGTAGAAGC CCTGGGCCIT G

SEQ ID NO:140: (Length of Sequence = 234 Nucleotides)

GTAAGGGAG TTGCAGAATC AAATGCTAC ATAGGCCAAA CAAAAAGAA GGCTTTTCA AAAACATTA AATTCACATG  
 CAGTCTCAGA GACTATTTAG GCAAAGTTCA AGTTAGGAGC TTTTAGGATG TGGGANTAAA ACTTTAATKG GAGGGGAGGG  
 CTGTCTCTG GAGAAGGAAG AAGCCAGACT TGTTAGACAG TACTCTAAC TCCTAGCCCA GCCTAGCGTG CCCT

SEQ ID NO:141: (Length of Sequence = 354 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAAACCT TCTTCATTTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAG  
 AGAAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTTA TTTTATCTC TTTCTCTACT  
 CATGTGCTTA ACTGGTGAAG TGATCTGTGA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCTTATGG CAACTACAAC

AGGAGGAATC CAGCTGGAAG TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC  
TCACTCACTC TGGGCTGCG CACTGGGGTT GTGG

SEQ ID NO:142: (Length of Sequence = 373 Nucleotides)

GTTTTGTCAA CACTTTTTTT TTAAGTTATT GGGTGCAAAA TCCCAAACCA GGATATGTTT ATGCTGTGTT GTTTATGTTT  
TINATTTGAC CCTCCCTCT TCAACCTAC CCCCTTTTAT ATCTAATGTA GAAAAAGCGA AATTGAATCT GGAAAGCAAA  
CTGTTGTATA TAGTTGCGGT AACATCATG AAGAGAGAGC CGGGCTGTCC AGTTGTTTTT GAGACAGAGT CTCACTCTGT  
TGCCAGGCT GGAGTGCACT AGCATGATCT TGGCTCACTG CAACCTCCCC CTCCCTGGGT TTAGGCGATT CTCCTGCCTC  
AGCCCTCCCA AAGTAGCTGG GATTACAGAC CGTACCACC ACAACTGGGC TAA

SEQ ID NO:143: (Length of Sequence = 262 Nucleotides)

CCGCACCTCG GCCAGAGCG GCTGCAGCAG CTGCTMCCTT TTCCCTGCCC CCGCTCTCC AGTCCCTTTT TTAATTACCA  
CTCCAMCTGC TGGGAACGGG CGAGAAAGAG GAGGAGCGA GAAACTCCCA CCGACCCACA GAGGGAGCAT GATTTCGGCA  
ACTTCACCTA TCATTCTGAA ATGGGACCCC AAAATTTTGG AAATCCGGAC GCTAACAGTG GAAAGGCTGT TGGAGCCACT  
TGTTACACAG GTGACTACAC TT

SEQ ID NO:144: (Length of Sequence = 384 Nucleotides)

GGAAAGCGG GACCCAAACA GTGGTGCTGG GGAATTTTTT CCTGTCCCC TTGGAAGGC TGAGTGGGTG ATGCAGCACA  
GGAACAAGGC TTGGACGTCA GAGGTCTCAT CTTCACTGTN ACAAAGCATA AAGGACTTGG GGTGAGCGT GTGTNITGGC  
TCAAGTGACC ATGCAAGTCC GTTCACCTCC TTCTAAGAC CCCATCCTTC TCCCAAGTCC TCCACAAGAG CTACCTCTT  
CAAAACAATA ACAGAAACAC ATCAAGCTTG GCGTCACTG AATTCAAGTT CTGATTTCTC CCGTCACCCC AGCAACAGTG  
CCGAGTTTGA TTGTGACACT TTGACCCAGC ACTTGGTTTT GAATGTTCTT TCGGCTTGT ACCG

SEQ ID NO:145: (Length of Sequence = 324 Nucleotides)

CTACATGGAA TCATAAGTKT TCCTAAAAAA GGAAGACAGA TTTGAAGACA GAGGAGGAAG GTGATGTGAT GATGGAACA  
AGGGGAGAAA ACGCAATGTG ATGTGGCCAC GAACCAAGTA ATGAGGACAG CCTACAGAAG CTGGTCAAGG CAAGGAAACA  
GATTCTCCTC TAAAGTCCCT GGAGAGGGCC TGGCCATGCT GACACCTTGA TTTTKTCCCA GCAGAAACTC ATTTTGGATT  
TCTGGCTCC CAGAAAAGTA AGGGGGTAAT GTGCTGTTTT ATGTCAGGTT TKGGGTAATT TGTTTATGTC AGCCATCGGG  
AAGG

SEQ ID NO:146: (Length of Sequence = 355 Nucleotides)

TTTGCTCCTT TCCTTCTTA TCCAAGCAAG GGTGTGGTGA CAATGACCTG ATCGGGGTTT AACGCGGCT CTGTCTGCTC  
ACCAGACCTG GGGTGCTGAG CTCTGACCAG CCTGGGCAGC CCAACCCACA GGAAGTGGG TTTTCATAGCT GGGTCTTCAG  
GAAGGGGTGG AGGCTTTGGG AGTGGCAGCT CCGGCTCC CACCACCCA AGCCAGAGAA TGGGGCAAAC TTGTATGCAT  
GGCTTATCTC TAAATTACTA ATCTGCTTCG GACCAGACTC ATCTCTACAG TATAGAGTTA GAGTTATTGC TTCTATGACA  
GGTGTCCAG AAGCCCTGGG TGGCTTTAAA GTCTG

SEQ ID NO:147: (Length of Sequence = 337 Nucleotides)

CAGTTTTCTG AGTTCCCGTG TGCTAGACTG GCCAGAAGAG AGGGTCTGGG GCCTGGTCAC TCGGCCACTC TCTCCTGTTT  
CTGGCTCTT CTCCCTTCAC TCCGTCAG TCTGGTTTTG AGAGCAGGGG CTGTTCTACA GCACCTCAGG GAAGGGAGGA  
GAGATACCTG CTGCTTCCAT TGCTTTTCCC TTCTGGAGT CGATGCCTTT CTAAGGGTTG GAGCTGCTCC TTGCAGGGGC

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GGGTCAGTTT CCCAGGCCAT GCCGGGGGTG GCCATCTATG CTAGGGCTGG AAGCTGAGGC TGGCCGCCAA CTGTGGGGCT  
GGGGTGGGGG TGGGTGG

SEQ ID NO:148: (Length of Sequence = 278 Nucleotides)

GGATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCGGCCC AACCCCATC GTCACCTCTGC  
TGCAACACGA CACAAAGGTT TAAAGATCTG GGCCCAAAGA CTCTGGGACC CTTCAAGCAA GTCAGGTGGA AGAAGGTTTC  
CCCCCCCCC ACCAGGCCTG TTTGTCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG ATGCTTGATA  
GGAAGATCIT TGATATCAAT GGCCTAAGCT CTGCTCAT

SEQ ID NO:149: (Length of Sequence = 368 Nucleotides)

TTTTTTTTT GTTTTCAACA AACTTTACTA AATAACCTG GAAAGGCAAT GAACGATCTG ACAATTTAAG CTCTAATGAT  
TTAAAGCTCA GCTAGAAGAA AGTGAGGCAT GACATATACT GTCAACGGAG GGTGAAGGAG GCAGATTTCT GGAAATGCAA  
TGATCCACCA CATTGTCTTC AAGGAGAAAC CTGCAGACAT ATTTTCAGGT CTTGCTAAGT AACAACTGTT TATTTGTAAAT  
CAATACATT GGGGAAAGTC TGCTATGTAG CTAAGGTCAC TGTGACCACA GACCAACAGA TGGAAAGGAA AAAGGCACCTG  
GACCAGCAAG GAAAAATACA TCCCCATCCT CAAAAGAATT TTAAGGTG

SEQ ID NO:150: (Length of Sequence = 367 Nucleotides)

TTGTGAAATG GGCTTGGGTA GATAAGGAAA AGAACCTCCA AGAGGTTAAG TGATTGCGG ATTTGCCTAA ATTATACAGA  
AGAGTCAGCA CCAGTGCCCA GGCTTCTGA TTCTTAGTGC AGTAAACACT AAGCACCATC ATTCCATTTC ACCACACTCC  
TGCTTTGCTG TTGTCTCTAG CTAAGAAAGC CTACCCCTGA GTTACCCCTT TCCATCTTAG AGCCTTCCCT CTGCTGTCT  
GCCCCCTGC GATGGGGACT TCTTTGGCCC TTCTACCCA GCCAGCCTC TGCCCGTTTT CTTCTCCTT TCCACTGCGG  
CTGAGCTCIT TTCTCCTTCC GAGAAGCCTT TCCTTCATCT TTCTGG

SEQ ID NO:151: (Length of Sequence = 366 Nucleotides)

CCCAGCGGCG CGCTTCCCTC CTCTCTCTC CATAGGTGGG GGTGTGGGC CTTCTTTTTT TTTTGTCTT GGAGGGCAGT  
TAAACTTCTC CATTTGCCCT TCTCTTACA CCCAAATGCC AAAGGACACT TTTCCTTTCT TTTGTGGGTA GTTGCAAAA  
AAAAAATTC CTATGGGTTA CTGCCACITT TAAATACTTT GTAACITAAA GGCAAAGTAG TATGTCACCTG TTTCTTTTCC  
CTGTAGTTA CTTTGTAGGT TAAACATCIT TCCATGTCTT TATTGGTCAA ATACAGTTCC TYCTTTTGTG CAATGTTAAT  
CCTAATATGG ACCATTTTTC CTAATGGGAT TACCGATTTT TTAAAA

SEQ ID NO:152: (Length of Sequence = 269 Nucleotides)

GTATTTCTGG CAAGTGCTTT CAGGGCCCTC CAGGGTTTGG CTGGTCACCA TGGAGGGGGG GTTCAGGTGC TGAATTTAGG  
GACCCAGCA TCTCAGGT TTCCCTTCC ATCTTTCCA GTGGCACTGT GTCTGAGCAG GTGTGCCAG GTGAGGTGT  
ATCCACTGTG TCTGAGCAGG TGIGCCAGG TGAGTTGTA TCCACTGTGT GTGAGCAGGT GTGGCTGTTG CAGGTGGAAG  
TGGGATATN TGGGCACCTG GGTGCCATT

SEQ ID NO:153: (Length of Sequence = 260 Nucleotides)

TTTCAGGATT TTATTTAAAA TTTATTGTAA TGGGGTCCGC GCAAAAGGAA GGGGTGGAGG GTGGGTACA TGCAGGGGAC  
ACAGGAACAN GATCCACATG GCCAGGNC CAACTTCTTC TGTCTGGGG AAGAGGGATG AAAAGACAAG ACCAGGGCTA  
NGAGCTGGGG TGGAAGAGG GAGGGNAAC ACTGGCTGCA TTCCCNAC CCCANGANG ACCTATAGGC CCTGGACCCA  
TGGGTCACCC TGGGCCCTAG

SEQ ID NO:154: (Length of Sequence = 405 Nucleotides)

TGGAACCTGT GAGTGGGGAC CCATGATGTA TGGGTCTCAC CTGACTTGAG GTGAATTTTG GAGTGAAGGG CCTGAGGTC  
AGCTCCCAGG TCGGTCTGTC TGGGCCAGGC CTGGTTTTC AAGGGGCTGA AGGATCCCAG TCCACCTGTG TGCATGTCAG  
GGCTCGGCCG GGAAGAAGCC AGCAAAGTCC CCGGTGTCCC TTGCTGAGTA TTCTGTCACA GACAAGCCTC CATTAAAGCC  
ACAGCAGTGC TACCCACCAC ACACACCTTG CTGGCCCGGC CACCACTGCT GGCTTCAGCC CCTTACGAG CCCATGGNTT  
AGCAGACCCT CAGATGTAGG TCAGTGGCCT TANCTGTNTC TATCCATGCT GTTAAACTCC CTGCCTCCAA CTGGGGGTCA  
CCAGT

SEQ ID NO:155: (Length of Sequence = 40 Nucleotides)

CCATGATCTT ATTTATTACA TCTAGTTTTT CTTTATACCT CTAAAAAAA GTGCCTTTTA GATTACAGC TTGTGCTTCT  
AAAGCAAAGG TTAAACATC ATGCCCCAA GGAACAAG GTAAAAAGGA AGCTGCCATA TAAGCTCTTA AAANTGTAT  
GTTACAAGGT TCTAAATCT CTTACAGACT GGTGTGTTGG TAGATTGTAC GACACTGACA TGGTGTCTGG GAGGGTCATT  
TATCTGATGG TTGGAGCAGC ACCATGGGA AGCTGCCAG ATGCTCTACT GAAGTCTTG GCTGTGCACA GAATGGGCC  
AAGGGCCAGN AATTCATGAG TCCGGGGAAC TTTGNGGTC CTTACTCAAT CTCCTTAGTG CTAAAGNTC AGAGTCTCAA

SEQ ID NO:156: (Length of Sequence = 443 Nucleotides)

GTCTCTGGA TTGCTTCGTT GGTTCGAAC TTTAAGAATG GCAAACGTG ATTGGNTCCG ATTAAGACAA GCTTTGTAGT  
TTCTTCGTG TAAACACCA ATCCCGCTG GGCCATGAGG TAGCAGAAGT GGGCCGCATC CAAGAGGCC CTTGAAGCCA  
GAGTGTGCGC CATGGTAGCC ATCGTCTGG ACTCGACGTC CATGTTGTG TTCAAGTTGG ACAAGACCAT GCGAGGTGC  
GGCTCCAAAT CTCCTCATTT CTCGTCTCCA CAGCAGTGG ACGCGGCAG CATCCGTCCG GACATGAGCT GGTAGACTGT  
CTTCAGAGGG TCGTTGATTK GGGAGGCTTT TTAGCAAACC TKGGTCATGA CTCGGGCGTG TGTCCGGCTG TTCCATCTTA  
CTTGCAAGTA GCAGAGCGTG ACCCCACAAG GCCATTCTTA ATT

SEQ ID NO:157: (Length of Sequence = 383 Nucleotides)

ATTGGAAAGG GTTTTAAACG GAGTCGGAAC CTGAGTAGAT TTCCAAATTT TACAGCCAGG ACTACAGAAG TGCATCATTC  
TAGAATGTGT AGACCTGAGT AGCTTATACA CTACAGAGCA CTTTGCTTAT TTGAAAGTAA TTCAGCAACA GGTCACTTTG  
GGATATAACC TGAACCTTTT TTTGGAGTGG GGTGGGTAGA CTACAGTAGA CACAAGGGCT GGACATGCAG ATGCTTAGGG  
GATTAGCGTT TTTCATAATT TGTCTGTTT GTCAGTTCAT TCCTGTGTGT TCTTACCTCT ACAAGGTAC ATTACACATT  
TTARGTTTTT TAGTGACCTT TAACCATGTT ACTTGAAGCA TTTTGAATA TAAAGCTATT TTA

SEQ ID NO:158: (Length of Sequence = 241 Nucleotides)

TGGTSTGTGG CTCAGCTGCA GCGGCASGTA AGTGGGTSTC CAGGGGAGTG GACAAGCAAT TCTCTGTCA TTTGCAACTT  
TCTTCAGGAA CTCAGATAAA GAACACTTGG ATAACGATGA TCCCTGTAGA GGGATTTTCT CTGTACCATC ACACATGGAA  
GAGGAGTTTC TAGGTCAGGA AAGGCAGCTN CTAAGCTAAA GGTTCCTTGG TCCCTTNGTC CTGGCATGCC TTAAGGAGGG  
G

SEQ ID NO:159: (Length of Sequence = 224 Nucleotides)

CTGTCAAGTAA TGGCTCACTA AAGGGCCAGC AGTTTAAATT ACACAGGTG CACTAAAAGC TGCAGCTTTG GCCAGGCAAG  
GTGGATCAGC CCTATAATCC CAACACTTTG GGAGGCGAG GCGGGCAAAT CACCTGAGGT CAGGAGTTCA AGACCAGCCT  
GGCCAATATG GTGAAACCTA AGCCTCTACT AAAATTACAG AAATTAGCCG GTCGTGTTGG CACA

SEQ ID NO:160: (Length of Sequence = 377 Nucleotides)

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GGAGGCTGAG GCGGGCGGAT CACGAGGTTA GGAGATGGAG ACCATCCTGG CTAACACAGT GAAACCCTGT CTGTACTAAA  
 GATACAGAAA ACTGGCCGGG CGTGGTGGTG GGTGCTGTGA GTCCAGCTA CTGGGAACT CGGGAGGCTG AGGCAGGAGA  
 ATGACCTGAA CCCGGGAGGC GGAGCTTGCA GTGAGCAGAG ATTGCGCCAT TGCACTCCAG CCTGGGCGAC AGAGTAAGAC  
 TGCTCCAAA AAAAAAAAAA ATAATAATCA AAGCTCTTGG ATTTATAGTT TGGTCCCAG CCTGTTTTG ATCTTTCCCT  
 TATCTGTTT TATTGCCATT TACCACGTCC TTTGGAAAC ATCCCTTTCA ACTGCTG

SEQ ID NO:161: (Length of Sequence = 273 Nucleotides)

GCAGCGGCGC CGGGCGAGGA GGCGGCAGGG GCGAGGAGGG GGCGGCGGGT GGCGACCCGC AGGAGGCCAA GCCCCAGGAG  
 GCGCTGTGCG CGCCAGAGAA GCGCCCGCC AGCGACGAGA CCAAGCCGC CGAGGAGCCC AGCAAGGTGG AGGAGAAAAA  
 GGCGAGGAG GCGTGGCCA GTCGCGCT GCTAGGCCCT CTTGCGCGG GCGCGCGCG CCCCCGAGC AAGGAGGCAG  
 CCCCCGCGA GGAGCCCGCG GCGCGCAG ACT

SEQ ID NO:162: (Length of Sequence = 286 Nucleotides)

TTTTGGTCAA ATAAATCAGA GTACTACAAT CATCAACAT CTGATTCATT TAACATGTGA GCATCTATAC CTGCCATTT  
 GTGTGAATAT TCAGTATATA TCTCATACCT ATTCTCATGC CTTCAITTTAT TGTTGTTATG GCTGTAGATA TGGAAAAAAC  
 AGTAGCTGAG ACATTTTTAT TATGAATAT ATTATACCTT AATCAATCAG TCAGAAAATG CTTAGGAAGA AGAAATGCAT  
 GATTGTAAAT GCATGATTTT AACATGCTAC CCGGCCAACA AAGTTG

SEQ ID NO:163: (Length of Sequence = 342 Nucleotides)

TGCCCCAGGA AGACAGAACA TGGAGAACCG TCAAGGCAGG AACCCACAG ACTGTCCCTT CCAGCCCACA CTCTGCCACC  
 TCCTGGCCCT GTCCCAATTC TGAGCCAAGG CCTCCCGAG GCAGAAGTTG CCTGGTCTC TGTCCCCACA GTGACCTGAC  
 TGGGGTGAG GGAGAAGGAG GAGAGAGCCC ATGTGTGGTG TGTGTGCCCC TGAGAATTC GTGGTGACTG CCTTTGGGAG  
 CCCGCAAGTG GCCAGAGGCA GGGGTAGCTG AGTTCTGGG AGACCCCTTT TTTTCCCCA RGTTCGCCAG AGGGCAACGC  
 CATCAGTAGC AGTGTGGTGT TT

SEQ ID NO:164: (Length of Sequence = 392 Nucleotides)

ATTACCCGGG CCGGCTCC CTAAACAGA TCTACGGACC TTAACGACG CCATGCTGAG GCTCATTCCA TCCCTGCRGA  
 CGTATGCAGA GCGCTCACT GCTGCCATGG TGGAGTTCTA CACCATGTTA GGAGGAATTC ACCCAGGATA CACAACCTCA  
 CTATATCTAT TCACCCGTG AAATGACTAG GTGGGTGAGA GGCATCTTTG AAGCGCTGAG ACCTCTGGAG ACCCTGCTG  
 TTGAAGGCCT CCTTCGGATT TGGGCACATG AAGCTCTGG TCTCTTCCCA GATAGACTCG TAGGGGATGA GGAGAGGCGT  
 TGGGACTGAA TGAGAAGATC GACACGGTTG CTCCTGAAGG CACTTCCCT AACCTTCGCG AGAGAGGAGG GC

SEQ ID NO:165: (Length of Sequence = 406 Nucleotides)

GTTATAATTA TCTGTITTTA TTATTTATG TTTATCTCT ACTGTGTATA ATGTAGAAAT TAACTTTAC CATAGGTATA  
 TACATATTGG AAAAGCATC TTATATACAG GGTITGTTAC TATCTGTGGT TTCAGGCATC CACTGGGGGT CTTGGAACAT  
 ATCCCTTGCA GATAAGAGGG AACTGCTGTA TCCATAGAAT AAAACACCC CATCTTGAAG ATAGGAGGTT CTGTAAATTG  
 GGATGGGGTC AGGGAATCTG AATTTTAAAA GTTTCCTATG TGATTTGATG CCCAGCCAAG GGCTGGGGAC CACTGTCTTG  
 AAATATAATG CTGAGGAAGA TACTGTCTTT GGATTTTCTT GGTAATTCCG AGTGCAAATT CTCAGGCTGG AACCTTATGG  
 GCCTTG

SEQ ID NO:166: (Length of Sequence = 453 Nucleotides)

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GAAAACTTTG CCATGGGTCA GTTTTATTGG AAGTTCATTT TCCTGAATGT TTGGAAGAAA GTCTAGTGAC TCAGGATAGC  
ATTTCTAATT TCACAGAGTT ATTTTTCCTG TATGAAACAC AGATTGCCTT TGAGGTCTCC TGTTTCTACT ACTGCCCCTC  
ACTTTTATGT GGGCCTCCTC TTTCCTTTGT TTCGAGAGAA CCTTTTCCTG TTCAATTCTG TTTTAATTTT CAGCAGTTTT  
TTTTCTGTGT GAGTGAGGCT GTTTCCTAGC AGGGAGGTCT GGTGAGTCAT TTTCAAGTTC ATCAGGGCTT CATCAGGGCT  
TGTCCACTTC AACCCCTACG CTATAGGNCC CTNIGCACCA TCTGCANTCT TCAAAATGTG CCCACTGGTT CGTCCCATG  
GANGGCTTGT TGGTAATTGT GGCTTTTAGG GGGGGCCATG GAAGGAGCAA ATC

SEQ ID NO:167: (Length of Sequence = 285 Nucleotides)

TTTACTCTTA AAAGTGTAC AACAGAATCA TGGACTGACA CAGGTAATGG CTGAGCCATA AGCAAATCGA GAAGTACAGA  
AATGTCCAC CCCAAACAGC TGCGGAGTAC ACATCACACA GGGCCTCTGG TCCCGGCTT CTCAGGTGCT CTGGAGTGA  
GGATCCTTTG AGGGAAGTCT GACCACTCT GTTGTCTACC TAGAGAGCAC GCCACTTGGG CCACCTACCC CCAACCTTTG  
GCCAAAGGAG TGAAAGGACC TGAACCTGT CGTCAACCTC AGCAT

SEQ ID NO:168: (Length of Sequence = 327 Nucleotides)

CTAGAGGGCA CTCTGTATAC CCGTCAGCTC CTGGAGCCAT TCATTCTATG CTGGGCAGAC AGGCTGTGAG AGGACATGGG  
GGACGGTGA AAGGNTCCAA AGACGAAGCT GINGTTTATC CTTGTGTTT TTACACAGGG AATGATGAAA CATTGAAGGG  
GTTTAATAAG CTTTTCCTAA AACATTTTCC CCTTAAACAG GCTGGCACTA TGTCGAAGCT GCCCAAATTT GAGATTGATT  
TACCAGCTGC GNTAAGTCA ACTAAACCCA NGCCTTTCCG AAAGAGACAT CGCAANTGGC TTACCCAANG TANTGTCCCG  
TTTTCAG

SEQ ID NO:169: (Length of Sequence = 346 Nucleotides)

GGTGCTATGG AGAGCCGGCC GTCTCCAGG GGTGAGCTGG GGAGGCTTCT GCGGTTCTGG AGTCCCGGCG ATGGCGCCAG  
TTCCCCAGCA AACCCCTCC AGAGCTGCCC CCGATGCAC AGACAAGGAG GGGGCTTGGG AGTGACTTGA GGCTGTGACC  
GGRTGCCCC CTGGTGTGGC AAGTGAGTCC TCTGTGGCCA AGAGTTCAGA GTCGTCCCTG AGGCTGAGTC GAACACAGAC  
CCGTGGCCCT CATAAAATTA AACATAAAG CACAAAATG GCGCAACCA GACAGCATTG GCTTTCAGAC AGGCAGGGAC  
ACGGGGGCCC CTTCGTGTG ACCTGT

SEQ ID NO:170: (Length of Sequence = 398 Nucleotides)

TTGACCTCAA CTTACTGAGC AATGCCGTAG CTATGGAATA GAAGCATTTG TTGCACTCTT TTTGTGAGCC AGGCCCTGTA  
GGAGGGATTG TGGATGGCAA AACCTCAGGT TCTGCCAAA TCCTCCCTT GGGGGCTGGA GGGTCTCTAG TTAATTTGCA  
TTCCGGTGCT TAAGGCCACT TTTGGGTAGA GGTITGGCAA GGATGGAGTG TCCAGACCTA TGATCCTCTA AGAAGTTTAC  
CTTTTAAAA CAGCCACCCA AATGGTGGTG GCGTGGGGAG CAGGTGGTGG TGAAGGGACT GGGGGTGTCT GGCCATKGCC  
ACGTACCAGA GGAGACTCTG TGAGCCCTCT CCCTGCCTGA GGGACACTTA ACTTTTATAG CACTACATAG GGTCAACG

SEQ ID NO:171: (Length of Sequence = 321 Nucleotides)

AGACAGCATC TGGCTCTGTC ACCCAGGCTG GAGTGCAGTG GCGCAATCTC GGTTCAGTGC AACCTCTGCC TTCCAGGTTC  
AAGTGATTCT CTTGCCTCAG CCTCCCAAT AGCTGGGATT ACAGGCATGT GCCACCATAC CCAGCTAATT TTTGTATTTT  
CAGCAGAGAC GGGGTTTAC CATGTTGGCC AGACTGGTCT CGAAGTCTG ACCTCAAATG ATCTGCCCAT CTAGGCCCTC  
AAAAGTGCTG GGATTATAGG TGTGAGCCAC TGCGCCTGGC CTTGGGTAA ACCTTCAA TGCAACCAAC CATTAAAGGT  
A

SEQ ID NO:172: (Length of Sequence = 293 Nucleotides)



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GAAACTTATA GTCTTGCCCTC CCAACCTTCT GAACACTCCA GTAGAAAAAT CTCTCGCCT ACCTTTATCA CCCCACGACC  
TACTAGCAAT TCTTACTCTC AAAAAAATC TTTTCTGAAA AATCAAGACA GAGTGCAAAC AATCAGCATA ATTTTATTAT  
GACARAACIT TTAAATTTTA TCCCCCTCTC TGAGAGKTCT GCTAGGACTC CTTTACAGATA GTGAAAAAGA AAKTTTTTAA  
AATTTATTCT CAAATCCGAA TTCCAATCTG TATAAAAAGG GCGATTCTCC CTC

SEQ ID NO:173: (Length of Sequence = 282 Nucleotides)

GCTTGGTCCC GTTCTCAGG AAAAGGATGG ACCTTCTCTT CTCTCAGAT GGTCCCTTCC ATTCCCCTGA AACCTGCATG  
AGAGCTCCTA ACATGTTTCT CCAATGCAAT CAAGCCTAGA CTCCAAATGT CCTCCCAGCT CACCTCCATC TATGCATCTC  
ATCTCTGGAT TTGGTGATCA GACTCTATAT TGACAGTAGG ATCTCAAACC CTGCATCCAT CCTTCTCTCA GCAAGCCCTG  
CTAGCCACAT GAGGAACAAG TTTCCGTGTC TTCATGACTT CC

SEQ ID NO:174: (Length of Sequence = 353 Nucleotides)

CAAGAGGTGG GAGAGGTAGG GGGCAACTAC AGCTCCCCAC CAGCCCCACC AGGGGGAATG GACCCCTCCC TGCTTCTGTC  
CCAAGTGGCT CCCCCTGTAT TATGGGGGGG ACTTTGTGCA AACTCTGCCC CGAGGGGGTG GGGAGGGTGG AGGGTGAGTG  
TGAAATGGCA GCGGTTGGGG CTGGCAGCTG TGCTACTGGG CACTGGGGGG CTTGTAGGGC TCCAGGAGGA GGGCCGAGAA  
GGTGTGACC TTGTCTGCCC CCCGCACCTC ATGGGGTAAC AGCGGCAMIT TCACGATGTG GAAGTTCTTC ATACAGGTCC  
TCCAATCTGG TCCAGATACT TGGCCTGGGT TCT

SEQ ID NO:175: (Length of Sequence = 394 Nucleotides)

GCCCATGCCC TTGTGTACAT AATCTCTAAT ATTTATATAT ATTGATATAG AATCTCTCTT ATAATATATG TCATAGAATC  
TCTCTTGGGC CTGGCGTGGG AATGTGACAT TAAGAAAACA TGCTAAGACT GGCCAGAAAA ATGGATATTT CCCAGACCTG  
GAGGATGGTG TGTTGGATGT ATAGGTGAGG TGTGGAGAA GATAATAAAC TCATTCCCCA AGATACCCTC TTCAACACAA  
GGACAAGAAG GAAGGTGTGT GGTGGGGGAG GGGACAATGG AGGGGGAGGA GTGGAAGATT TGGATTTTCA TTAAATAAAG  
TCAATTGAAA AATGAAAGTG CACCCCCCT CCAAAAACA GGAGATTCAT TTAGCAAGAG CCGTTTCATT CACA

SEQ ID NO:177: (Length of Sequence = 381 Nucleotides)

ATTGGGACGG GCCCCCTCT GAGGCGACGG ATCGATAAGC TTGATATCGA ATTCCITGAT NTTTTCTAGT GTTATGGTTT  
TCTCCCACTC CAATAACTWT TCATACCTKT GGTCTKAGTT TTTCCATCTA TAAATCATG TGCTAAATAA TTAACATATCA  
TCTCTATCAT TGTCAGACTA CACAAAGCTT CCAGCCTGGG CAACAGGAAC CCTGTCTCTA AAAAAAATAC AAACATTAGC  
CAGGTGTGGT GGTATGCGCC TGTAATCCCA GCTACTTGGG AGGCTGAGGT GGTAGGACTA CTGGGCTTT AGAGGTCAAG  
GCTGCAAGTG AGCTGTGATT GCGCCACTGC ACTCCAGCCT GGGCAACAGG GCAAGACCCT G

SEQ ID NO:178: (Length of Sequence = 443 Nucleotides)

GATTTTATTC AAACACAGGC AAGAACAATG ACCTTCAGAG CTGGGTAAAA ATAATAAGTT AAAAGCATGG TTAGAATTTT  
AGACAATCAG ATAAAAAGTT TGAAGGAAGT GATTTCCCTT TCCTCTCTTA ATTGATTAAT TCAACACAGC ATAAAAATAA  
TTTGTATCTA TAAATATCC TTGTCCAC ACAATGAAC TGGAGGTGGC CCTAGGATTT CCTTGACTAT GCACAATGCA  
CACAATCTAC ATGTCCCTCC TCCCAACTT TTAAGGCAAA AATGGTCTG CATCTTCAGG CAGAGGGTGG GCTCATGCCA  
GCAGTCAGCT GTGGTCAAGG AACTGGGGG TGCGTTTYCT CCACCGAAAG ATGCTGCTT TGGGTCCACT TTGGGCGCGG  
GATCCCATTT TATTTTCTAG CTTGTGCTC ACCACAGGGA AAA

SEQ ID NO:179: (Length of Sequence = 325 Nucleotides)

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TGGGGGACCA GCATTGCTCC CAGCTGAGGG CGCGTCTTC CTCACCACT ACCGGGTCAT CTTACGGGG ATGCCACGG  
 ACCCCCTGGT TGGGGAGCAG GTGGTGGTCC GCTCCTTCCC GGTGGCTGCG CTGACCAAGG AGAAGCGCAT CAMCKTCCAG  
 ACCCCCTGTG ACCAGCTCTT GCAGGACGGG CTCACGCTGC GCTCCTGCAC ATTCCAGCTG CTGAAAATGG CCTTTGACGA  
 GGAGGTGGGG TCTTACAGCG CCGAGCTCTT TCCGTAAGCA GCTGCATAAG CTGCGGTAC CCGCCGGACA ATCATGGCCA  
 ACTTT

SEQ ID NO:180: (Length of Sequence = 213 Nucleotides)

GAGCATGCCC CCGGAGTCCC CAAGATCCTG GTGGGAACC GCTGCACCT GCGTTCAAG CCGCAGGTGC CCACGGAGCA  
 GGCCAGGCC TACGCCGAGC GCCTGNCCT GACCTTTTTT TAGGTCAGCC CTCTTTGCAA TTTCAACATC ACAGAGTCT  
 TCACGGAGCT GGCCAGGTTG GTCCTGCTGC GGCATGGGAT GGACCGGCTC TTG

SEQ ID NO:181: (Length of Sequence = 219 Nucleotides)

AGCTTTATCA CATTATACAC AAACATAGAA AACAGTGTTC CAGAAGAGAA GCAAAGGCCA TTGGCTTCAA ATATTTATGC  
 AACAAAGAAA ATGTTCTCAG CCCTTAAATG AGCACTGTG ACTGTGCAA CAGTGAGATA ACTAGTCAAT GGAAGAGTTC  
 AACACTAGAG CATGTATCTC AGTCTGTCT CATATTGCTA TAAAGGGCTS CCTCAGACT

SEQ ID NO:182: (Length of Sequence = 451 Nucleotides)

GTCTTACTCT GTTACCCAGG CTGGAATGCA GTGGTGTGAT CATAGCTCAT TGCAACCTCT GCCCTCTAGG CTCAAGTGAT  
 CCTCCACCT CAGCCTCCCG AGTAGCTGG ACTACACGTA CATGCCACCA TGCCAGCTA ATTTTTGTAT TTTTGGTAGA  
 GACGGGGTTT TGCCATGTTG ACTAGGCTGG TCTTGAATC GTGAGCTCAA GTGATCTGCC TGCCCTCGGC TCCCAAAGTG  
 CTGGGATTAC AAGCGTGAGT CATGGTGCCT GGCCTAGTTT GCTCTTATTT TTTTCCATC TTTGCAGTTT CTAGGCCACT  
 GGGAACAGGC TGCAAGCTC AGAGTCCACA GCTGTGAGGC TCCATGTGTC ACCATCAAAA AATAAGGTGA CGAGAGTCTC  
 GGGTTTCCCA GTGTACGGC AAGAGGGGTT ACTGCTCAG GGTACACACA G

SEQ ID NO:183: (Length of Sequence = 444 Nucleotides)

CCAAGTTGAC CCGCCGAACC ACCGAC-GGA AGAGTGAGTT CCTGAAACT CTGAAGGATG ACCGGAATGG AGACTTCTCA  
 GAGAATAGAG ACTGTGACAA GCTGGAAGAT TTGGAGGACA ACAGCACACC TGAACCAAG GAAATGGGG AGGAAGGCTG  
 TCATCAAAAT GGTCTTCCCC TCCCTGTAGT GGAAGAAGGG GAGGTTCTCT CACACTCTCT AGAAGCAGAG CACAGGTTAT  
 TGAAAGCTAT GGGTTGGCAG GAATATCCTG AAAATGATGA GAATTGCCTT CCCCTCACAG AGGATGAGCT CAAAGAGTTC  
 CACATGAAGA CAGAGCAGCT GAGAAGAAAT GCCTTTGGGA AGAATGGCTT CTGTCAGAGC CGCAGTTCCA GTCTGTCTC  
 CCCTTGGAGA GCACTTGCAA GCAGAGTTTG AGGCTCAGCA CCGA

SEQ ID NO:184: (Length of Sequence = 399 Nucleotides)

GGCAGAAAGA GGAAGGAGAC AGTGCCAGGA GGAAGAAGGA AGGAGTCCCT TAGCTCTCTT CATTTGCCCC TTTACTTCTT  
 GCTATCTTCT TCTCTCTTC TTCTCTCTT TGCCNTATG CCTGTATTT TGGCAATATG ACAGGCTGCT CTACCCAAGA  
 TCAGAACTCC AAAACCACTC CCACCCCTGA AGGTGGGGAG GTCTTAGCA GCCCTGGGTG GCTGCTGTG CTCAGGTCTT  
 CAGCTCCATG GGAAATAAAA ATGGCACCTT GAATCTCTAG GATTTTGTCA CTTTGGAGTC ACAGCAAAGT TCTCTTCTC  
 TTGTCCCCC GTTGTCTGCT CCTTGGGTTA TAGGACATGG TAAATATTTA TTAATTTTCT GGAACCAAGT TTTTATTAG

SEQ ID NO:185: (Length of Sequence = 263 Nucleotides)

CAGAGACACT GGCCAGCTA TTTTCAGCAG GGACAGAGTC GAGGCTCACT GGGGATGGCT TCAGAGGACA CTGAGGCCCC  
 TCTCAGGGAG GGCAAGGCAC AGATACCCCA AATTCCACCC CACGTCCCAA AGGTCTCCCA GCGGGGCTGT CCAGTCCATG

TCAGCAGAAG GCTCTTGGGC GTGTGAGGGA GGGTCTTGGG GAACTAAGCG AAGGAGGCAA ACGCCAGGGC  
CCCTTGCAGGCACC ATGTGCACCA CTT

SEQ ID NO:186: (Length of Sequence = 343 Nucleotides)

GTTCCAATAG CTGGTTTTAT TCTCAGCACA AAAGGGCCCT GTGTAAAAAC CAGAAGGATT TTGTAAAATA TCAAAATGAA  
TATTTGGCCT GGAGGTTGGA AAGTGAAGCA AGGCTGGACA TAGAAAAAAA CTGATCAGTA GTTATTCAGG ATATTATTTA  
GGATAAATGA AATAGGAACT TAGGGGCATC TCTTACTTTT CTACAGGTTC TTATCTGGGT CAATGAAGAA ATTGTGTTTA  
TCTTGCTGCC CTTCATCAG GTTTTTTGCA CTAATGAAA AAAGCCGGCC GAAAAACAA ACCCAATCCT TTCAGTCCTA  
GCTTTTACAT CTGCCCTTG CAA

SEQ ID NO:187: (Length of Sequence = 229 Nucleotides)

GGTGGGCTC CACCCCTTCC ACGTCATCCG CATCAACAAG ATGTTGTCT GTGCTGGGGC TGACAGGCTN CAAACAGGCA  
TGCGAGGTGC CTTTGGAAG CCCCAGGGCA CTGTGGCCAG GGTTCACATT GGCCAAGTTA TCATGTCCAT CCGCACCAAG  
CTGCAGAACA AGGAGCATGT GATTGAGGCC CTGCGCAGGG CCAAGTTCAA GTTTCCTGGC CGCCAGAAG

SEQ ID NO:188: (Length of Sequence = 284 Nucleotides)

CCAGCAACTC AAATTCACCA CCTCGGACTC CTGCGACCGC ATCAAAGACG AATTCAGCT ACTGCAAGCT CAGTACCACA  
GCCTCAAGCT CGAWTGTINAC AAGTTGGCCA GTGAGAAATC AGAGATGCAG CKTCACIATK TGATGTACTA CGAGAKGTCC  
TACGGCTTGA CCATCGAGAT GCACAAACAG GCTGAGACCG TCAAAGGCT GACGGGATTT GTGCCAGGT CCTGCCCTAC  
CTTCCCAAG GAGCACCAGC AGCAGTTTTT TGGGGGCCAT TGAG

SEQ ID NO:189: (Length of Sequence = 215 Nucleotides)

GGAAGGATGA GAAACAGATT TCTGCTCACT TCATGGGCTG RCTTGRATT GACGATGGTR CAAACCCAG ATTATCCTCA  
TGTAATTTAT GAAGATTATG GAACTGCAGC GCATGACATC GGGGACACCA CGAACAGAAG TAATGCAATC CCTTCCACAG  
ACGTCACCTGA TACAACCGGT CGGGCACATC TCKGGCCCTA TGCTGCGGT GGTGC

SEQ ID NO:190: (Length of Sequence = 153 Nucleotides)

TTTCATATGG AAAGAGCTAG TACAATCACA TATTTGAAAG GAGAAACAAT AGGTACTGAA CCGGAGGGAA AGGGCGAGGG  
TGAGTGTGCC AGCACCGGCC TGGTGAATCC ACGATTGGT TTCCCATCCA AGGGTAAGTT TCCCAAATA CCG

SEQ ID NO:191: (Length of Sequence = 316 Nucleotides)

GTATTTATAC ATTTATTTAT ATATGTATAT TTAATTCAGA NGAAACGAAC ATTTGGGGA CAGGAAGCAA GCAGGCCCGG  
GGCTGCTTCC CTCCTGCCC ACCTCAGAGT CAGAGTTGGC ACATGACAAA TACCAAGCTC AGGGTGAAGA ACTGGGAGTT  
AACTGGGAAG TAGGGKGGC TCTATGCACA CGCAGGCTTC TAAGGGTGCA CGGTATGGGC AGKKGGTTTG CACTGGGAGG  
CCCTATGTAC AGCTTGAAAG CTAGGGGTGA GATTAGCCCA GTGACTACAG GAACATACGT CAAAGTTGAG AGAAGA

SEQ ID NO:192: (Length of Sequence = 360 Nucleotides)

GTGGTTTTTG GTTATATGCA GCTTTTGAAT AGCATGTATT GTGTCTTTT CTCTCTATG AATAATTTTA TATTTATGTC  
TACTTCTTGA AAGTTTACTC TTTGATGCTC TAAGAGAACA GCCAGATGGT TTATATGAAT AANCTTTATC TGCAGGATGG  
TGGATTGGTA AATNAGGAGA ATGTGTGTTG AGATATCAAG ATTTATGTCT GGGAACTAAA ATATATAATG CCAAATGTGT  
TTTGTCAAT TACTAGAGAA TTCTGTGCAA ACATATCATC TCTTCACATG CTGCACACTT TGCTTTTTGT TAAACAGCAG  
GTAGTAGACA GACCAATACC AGTTTCGGT TAAGG

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SEQ ID NO:193: (Length of Sequence = 397 Nucleotides)

GAAGAAGACCA AGGAGATGGT GAAGACAGCA GAAGCCCAGA AGCAGCAACT GAAGGAGGAG CAGGGGAGGT CAGCAAGGAA  
CGGGAGAGTG GGGATGGAGA GGCTGAGGGA GACCAGAGNA CTGGAGGGTA CTATTTAGAA GAGGACACCC TCCTGAAGG  
TTCAGGTGTA GCGTCCCTGG AGGTTGACTG TGCCAAAGAG GGCAATCCTC ACTCTTCTGA GATGGAAGAG GTAGCCCCAC  
AGCCACCTCA GCCAGAGGAG ATGGAGCCTG AGGGGCAGCC CAGTCCAGAC GGCTGTCTAT GCCCCTKTTT TCITGGCCTG  
GGTGGCGTG GGGCATGCGT CTAGCTTTCA CTCTGGTTCA GGTCCAACAG GGTCCGTTCT GTGCTTTTGG TGCCCC

SEQ ID NO:194: (Length of Sequence = 225 Nucleotides)

GATTATTGGC TTGCTTTTCA TAACATGTAT TTTAAGTAT TTACTCTCTT AATGGCCCTC GTGTCTATTT TATACATCAT  
ATCTCTTAAT TCCTAGATG GAACACTGAA GGACAGGAAT TAAGTAAGTG ACTGGCCATG CAAGGGTTGG AAATTTTACT  
GTATCCCTTC CTCGTAGAA GTATGTAA ACATTCAAGC AACCACATAT CTAACAGAGG AGTTT

SEQ ID NO:195: (Length of Sequence = 294 Nucleotides)

ATTACTAGAT ATTGTATGT TAAATTATGT GGGTTTTCAA ATTTGTGGAG AATAAGTAAT AGTGACATTA GTTTAAGGAC  
AGTGTTTCAT CAGGGCATT TTTAATGAA TCTTATATTT AAATGCTGT TTCAGGAATT CATGTGAATC TTTCTTTTAA  
TAGAGGACCC ACAGGCATGA NTTATTTACT CCTCCGGTGA TAGGTTCTCA CCTGTATGAA AGCGGAAGCA AATTCCAGGT  
TAGAACATTA TNCATGTTAT GTAGGGGGT ATAAAGTGTG TAAGTTTAAAT ATTT

SEQ ID NO:196: (Length of Sequence = 233 Nucleotides)

TTATTTTCT CTAAATTTTA AAATAGAAGA CTTAATGGA AAACATTTAG TACCATCATG TCAMCCTGAA TGCCAGCAAT  
ACCTCGACTT TTACACACGC AGGAAGCCTA GTAAAAGCCC CGTCAGTAGT ACACATTTCT CTATGGTCTT TCAACAGTTT  
TTCATATACA AAATTTTCTG CTATTTTTC TTTTGCAAAC AGCAATAACT TTTGGGTTTC CCATATGACC ACC

SEQ ID NO:197: (Length of Sequence = 230 Nucleotides)

AAGATATCTA CCTGGAGTAG CTGTGCAGCC CCGCCCTCTG CTTCCCCCAG CCTCAGGCC AGTGCCAGGA CAGCTGGCTG  
CTGACAGGAT GTGGCACTGC TTGAGGAGGG GCACCTGCCA CCGCCAGAGG ACAAGGAAGT GGGGGCCGCT GGCCAGGGTA  
GGGAAGGKTG GGGCAATGGG GAGAGGCAAA TGCAATTAT TGTAAATATAT GGAATTAGAT TCATCTATGG

SEQ ID NO:198: (Length of Sequence = 118 Nucleotides)

TTCTCCTGGG GAAAGGGCTG TTGCTGAAGT GGCCGGTTTT TTTAAGCATC GACATTTGCA TCCAAAGGTT CAAGCAGCCG  
CCTCAGGTTT CARAGGCTTC CACCTGATGG CTGCATT

SEQ ID NO:199: (Length of Sequence = 268 Nucleotides)

TAAATGATGG AGTTAAATGA TGTGTGTCAGT GCCTATTTAA AAACTACTC TTCCCTTCT CTATGAGTTC TACTTTGGTA  
AATATTAATA TTTAACCAGT TAGTAAACT AACACCACTA TTTCAATTCT CTTTGTGCA TAGTAAGTAA ATTTTGCTTT  
ACTTACTTTA TAAAAAATA CTTTACATT TATAAGCAG GTTTTAGAAA AACGGTTTAC AAGAAAGTTT GCCTCCATTT  
CACTGCCAAT TTAAGCACAG GGGAAAAT

SEQ ID NO:200: (Length of Sequence = 422 Nucleotides)

CCAGTGAGTT TGTGAAAAGC AACAGGGGTA NGACAGGTTT AAGGAAGGAC ACAGACAGTG CCTGTTTTA GGTCCAAAT  
TTCTTCTTTT TAATGGGTGG TGGGAGCTGA GCAATGATGT CATTTGGAAG GGGCAATGAC TTGTCAATNA TGCAGAACAT  
GTAGGCATCA TGGAGAAGGA TGTGCATCGG TCTCTTGGGA TGAAACTGA TGTGTGTGAT AGGAGTATCC CTTTGAGGCC

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AAAGGTGGTG AAAGCCCTGC TTCTGGACAG TCCGGCTCCA ATCTGTATAC TGTTTGCTG GGATGCTGTA CTCAAATACC  
TGCTGGTCCG AATGAGCGAT GACAAGGTTG TTGGTATTG GGGGCAATAG CCATAGCAGT CACTTGGGAA ATGTAAAGCA  
GGCACCGTGC AGTGAAGTTT TA

SEQ ID NO:201: (Length of Sequence = 273 Nucleotides)

ACTCCACGCT GATGAACCG ACGTCCATTT CTCCAAGAAA TTCCTGAACG TCTTCATGAG TGGCCGCTCC CGCTCCTCCA  
GTGCTGAGTC CTTCGGGCTG TTCTCCTGCA TCATCAACGG GGAGGAGCAG GAGCAGACCC ACCGGGCCAT ATTACAGTTT  
GTGCCTGAC ACGAAGACGA ACTTTGAGCT GGAAGTGGAT GACCCTCTGC TAGTGGAGTC CAGGCCCCCA GACTACTTGT  
TACGAGGGCT ACAACATGTG CACTGGGTGC CCG

SEQ ID NO:202: (Length of Sequence = 436 Nucleotides)

GGACTCCAAC CCCCAGGAG GCCGAATGCT GAGCTTGGCA ATGGTGGCTT GGATGGAGCT GATGGGCACA TCCCCACCGA  
GGACCAGTTC CTGGGAGTCC TGAGGAAGGT GGTTCCTCTG GCTGATGCTT GCACTGGCCA AGGGTTTGCA TGGAGGAGGC  
ACACCATGGC GCTGCAGGAC CTGCTCCACG TGTCTACCA CTGCCTCATA GCAGAACCTG AGGTGCAGCT TCTCCTGCAG  
CATGTGCTTT CTCTGCTGCC GCATGCGCCG CACCAGCTGA GGCAGCTCAG GGATTCTCKT CCCAGCCTCC ACCTCCTGCA  
CAGCTGCATA GAGCAGTGCA AAGGCTCCCG TCGGGCCAC ACCAGAGCTG CAGTGCACAA TGATGGGCGT TTGCAGGGGC  
CGTGATGCAA GGTAATTGTC GTGCACCTCC TGGGTT

SEQ ID NO:203: (Length of Sequence = 336 Nucleotides)

CTGCATGINT TGGGGACACT TACCCAAGG CGCGCGTTC TCATTAGGAG CTGGGACCAG AAGTGAATAA GCCAGGTTCC  
TGTCTCAGGG AGCTCCATAG CAGGACTCAG AACCACACAC GGCCCTCTAG GCATTTKTGA AGCTCTGTGC TTCAATTTTT  
TTGCTTTGCC TCTAGTTTTG CCTTGCAGT ACCAATGCAG CCAGCCCATG TKTCCCTCT ATGTGGAATG TTAACGATAT  
TCCCACITGT TCTGGTGTCC TTCTGTAAAT CAGAGCTGCC GTGACCATTG CAGTTCAGGC ATCCTGGTGG CCTGGCTTTC  
TCTGGGGCAT AGAGCT

SEQ ID NO:204: (Length of Sequence = 393 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAATAA TAACCCCCCA ACCCCCATCG TCACTCTGCT  
GCAACACGAC ACAAGGTTT AAAGATCTGG GCCCAAAGAC TCTGGGTCCC TTCAAGCAAG CTCAGGTGGA AGGAGGTTTC  
CCCACCCCC ACCAGGCCTG TTGCCCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG AAGCTGATAG  
GAAGAACTNC GATATCAATG GCCTAAGCCT GCTGTINTGCC CAAGGGAGCC AAGGGCAAGA GCCAAAGGCG CAATTAAAG  
GACGTGGACC TGGGGGGCCA GAGGAGGCAC CACAGCCGAG GGGAGCCACG CCTTGGGCGG GCAGGGCACA TGG

SEQ ID NO:205: (Length of Sequence = 390 Nucleotides)

GAGGAAGAGG ATGACCTGAG TGAGCTGCCA CCGCTGGAGG ACATGGGACA ACCCCCGCGG GAGGAGGCTG AGCAGCCTGG  
GGCCCTGGCC CGAGAGTTCC TTGCTGCCAT GGAGCCCGAG CCGCCCCAG CCGCGCCCC AGAAGAGTGG CTGGACATTC  
TGGGGAAACGG GCTGTGAGG AAGAAGACGC TGGTCCAGG GCCGCCAGGT TGAGCCGCC CGGTCAAGGG CCAGGTGGTC  
ACCGTACATC TNCAGACGTC GCTGGAGAAT GGCACACGGG TGCAGGAGGA GCCGGAGCTG GTGTTCCTC TGGGTGACTG  
TNACGTCATC CAGGCCCTGG TTCTCAGTGT CCCACTCATG GACGTNGGGG AGACGGCCAT GGTCACTTCT

SEQ ID NO:206: (Length of Sequence = 172 Nucleotides)

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CTTTACTGTG GGTGTGGGTG TCACTGTCAC TGCCACAGCC ACTINGAGGG ACACACAGCT TTAACCCCTR TTTGCTTAGG  
NGAAGGGTGG GGGCATTGAG GGTATAAAA CTAATATAT ACACAGAAGG TCCTAGGKAG AAAGCCACCC TGAGCACACA  
TGCTAGGCA CA

SEQ ID NO:207: (Length of Sequence = 215 Nucleotides)

AAGGCAATTGA GAAGATTTAT TGAATATTGG TTAAAAGTAG ATTGACAATG ACATTAAAGA ATAAAGTGTA ATTTATTTGG  
TGCTACTTTG TGAATGCTTC CAAGTACAAA TCATCTCACA ATACCATATA CAACATACIT TCAATCACAA CTCAAATATA  
AAATAACCTA CAAAATCACA TTGCTATAAT CAATATACAA TAATTGTATT TTTAA

SEQ ID NO:208: (Length of Sequence = 444 Nucleotides)

GGAGTTCTCT TGTCCACGGA GAGCAGTGTG GCAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG  
TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCCG CTGGAGGAGC TGACAACCTG ATCAATGAGG  
AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCGAGGA GAAAACATGT CCAAATCCT AAAAGCACGA  
TCCATGGTCA CCAGGTGCTT TAGAGATCAC TCTTTTGATA GGGGGTACTA TGAAGTTACT CCTCCAACAT TAGTGCAAAC  
ACAAGTAGAA GGTGGGTGCC ACACTCTTCA AGCTTTGACT ATTTTGGGGG AAGAGGCATT TTGACTCAAT CCTCTCAGTT  
GTACTTGAGA CCTTCTCCC AGCCTGGGAG ATGTTTTTTG TATT

SEQ ID NO:209: (Length of Sequence = 338 Nucleotides)

GCAGATCACT TGAGGTCAGG AGTTCGAGAT CAGCCTATAT ATGCAAGTAC ACACACAGGC ACTCGCACGC ATGCATGCTC  
ATGCAACACA CATGTACACT CTACATGTAC AGCTCACATA TGATCCATA CACATGTGCA TGCTACCCA TACACCAGCC  
ACACACAAGT ACTCATACGC ATACATGGCC ACACACAAAG TACACACAG TACACCATAT GCATATGTAT GCACCTATAC  
ACTCATAAT ATGTGCCCCC TCAGAGAAGT ACACAAGTGC ATGCGCATCA CACATGCATA CGTGCTCATG CACACACAG  
GGACATTTCA TACACAG

SEQ ID NO:210: (Length of Sequence = 371 Nucleotides)

GAGGAAGTAG AGCCTNAGGA GGCTGAAGAA GGCATCTCTG AGCAACCCG CCCAGCTTGA CACAGAGGTG GTGGAAGACT  
CCTTGAGGCA AGCGTAAAG TCAGCATGCT GCAAGGGGAC TGTAGATTTA ATGATGCGTT TTCAAGGTA CACACCAAAA  
CAATATGTCA ACTTCCCTTT GGCTGCACT TTGTACCAA TCCTTAATTT TTCTGAATG AGCAAGCTTC TCTTAAAGA  
TGCTCTCTAG TCATTTTGGG TCTCATGGCA GTAAGCCTCA TGTATATACTA AGGGGGAGTC TTCCAGGTGT GACAATCAGG  
TTATTGGAAA AACAAAACGT GGTTTTGGGA TCTGTTTGGG AGACTGGGA T

SEQ ID NO:211: (Length of Sequence = 295 Nucleotides)

CCTCCCAACG TGTGACATT ACAGGCGTGA GCACACGCAC CCAGCCCATC TAGCATAATG TTTGTCATAG TTGTCAGCAG  
ATAAATATTG AATGACAAAA CTCAGATGGA GGAAAAAGAA CAAAATAACC TAGTTCTCAG AAAGATTTAA TGAGCAAATG  
GGAAATGTC AAAAAGATTT ACAGACAGGG GCATCTTAGA GTCAGTGAA TCACACAGGC CTTCCTCAG CTGAGGGGC  
TGCTGGAGG TGGGGGTGGG GGTACACCTC CTCAGTGGG AGAGACTTGC CAAAT

SEQ ID NO:212: (Length of Sequence = 370 Nucleotides)

TGGCCGATAT GAGGGGGGTG GGAAGTGGCC CCGCGCTGCC CCGCGCGCT CCCTATGTCA TTCTGAGGA GGGGGGATC  
CGCGCATACT TCACGCTCGG TGCTGAGTGT CCGGCTGGG ATTCTACCAT CGAGTCGGG TATGGGGAGG CGCCCCGCGC  
ACGGAGAGCC TGAAGCACT CCCACTCCT GAGGCCTCGG GGGGGAGCCT GGAAATOGAT TTTAGGTTG TACAGTCGAG

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CAGTTTTGGT GGAAGAGGGG GGCCCTAGAA ACCCTGTAGC GCAATGGGGT TGGGOGCCCC AAAGGTTAAG TTTGAACCG  
AAGAGCAAAG GAAGAGGCGA TCATCATAAG TGGAGGATTA GGATTAGGAT

SEQ ID NO:213: (Length of Sequence = 302 Nucleotides)

ATCTGTGGAA TAATCTGCGG GCTAACACGG ATAACCTAGT ATAAGAACCA CCCAGTTGAT GTCTATTGTG GCTTTTAAAT  
AGGAGGAGGA ATTGCACTGT ACTTGGGCTT GTATGCTGTG GGAATTTCC TGCCANTGA TGAGAGTATG TTTCAGCACA  
GAGACGCCCT CAGGTCCTTT GACAGACCTC AATCAAGATC CCAACCGACT TTTTATCTGC TAAAAATGGG TAGCAGCAGT  
GTATGGGAAT TTTCTCATAC AGAAGGGCAT CCTCAAACC GGAAACCACA GAGATGCTAG GT

SEQ ID NO:214: (Length of Sequence = 354 Nucleotides)

ATGGATGAGT GGGCACCCCG CACAGGGCTG CAGGGTGGAA AACGCTCGAC GGCCAGGTGG TGAATTGGGG GCAGAGAGCG  
CAGTGINGTA GGGGAGGAGA GGTGGTGTCC CTGCTGCCTG GGAGCCAGCC TGCCGTGTCCT GTGGGCAGAG CAAGGCACCTT  
TCTGCTGCG GTGCTTCAG GGCTAAGCA GCGCTGCAC ACTCACCAGC GCAAGGCTCC TCTGCAGGGA ACGAGGGCTG  
CTACCCATTT CACAGATGAG GGCAAGCAAG GACTTGCCCA GGGTGGCCA NAGCAAGTGC GTAACAGGCC CTGAGAAGAG  
NGCCAGTGAG CTCATCCTGA GTTAATTATG GGCT

SEQ ID NO:215: (Length of Sequence = 260 Nucleotides)

TGGTTCAAAG TCTAGGCCCT CTNAGAGCT GGCTGATTCA GCTTGCCAAC AGTGACATCA GGGTGAGGCT TCCTCTGTCC  
ACAGCATTAG CTGCGAATAT CCTCATGGTC ACAAGATGGC TGCCAGTGGC CGTCAGGGTG TGTGCTTCCT TGTTCACATC  
CAGTGAAGA GTGACAGCCT GCTCCCTTA GCTCTCTGAC ACCANTGTGA AGGTGCCANG AACTTACTAG CAGGNCITTC  
CTCATGACCC ATTCAACAGG

SEQ ID NO:216: (Length of Sequence = 232 Nucleotides)

CTTGGACAAG ATCTGGGATA ATTCTCTGGA TTACCTGGCA GAGACTTTTK TTCTCTTCCC TTACTGTCTC CCAAATAAAC  
AGTCTCTCAC TCTGTGTGA GCCACCTGAA GCTGTGATAT TTCCAACGAC TGTAGGAGGA AAAAAATTAAG GGGAGAGAGG  
AAAACAAAAC CAACCAACCC CTAANATCAT TTTTATTATG TACATAACGA CCTCATTTCTC CTGTATATGC GG

SEQ ID NO:218: (Length of Sequence = 219 Nucleotides)

CTGCAACCAT CCATACCTTT TNCCTGTGGC TGCTATGGAG TCCCCAAAC TCCCAAGTGG GGCTTATGAG GGTGGGGCAC  
TTATTANGIN GTCTGGGAAG CTCATGCTGC TCCAGAAGAT GCTGCGAAGC TGAAAGGAGC AAGGACACCG AGTGCTCAAT  
NITCTCGCAG ATGACCAANA TGTAGCCTT GCTTGAGGSC TTTCTTAGNC TATGAGGCT

SEQ ID NO:219: (Length of Sequence = 390 Nucleotides)

GATAGGTAGC AGAGACCAAG GGCAGGGTG CTTGAGATGA GCAAGAGAAC CCAGTCGAAC CAGATACCCC AGGTGGGCGG  
GAGGGACCCC AGACCTTCAG AGGGCTGCCC TGGTGTCTC CACAGTGCAG TCCCTCTGTA TTCCAGAGT GGGATCGGGG  
CTTTGAGCCC ACCCTGATGC CTGCCCTCCA GGATGGCTGG TTTAGTCTGG GTCCATGTCC CAGACCCCTC TATTCTGCTC  
CAGGACAGCA GGAATTCAGG TCTTCTCTGG GGGTGGATAT AGGAGAAAAT TTCTGCCTGG CACACACCTG GGCTCCAACC  
ACTTGCCAAG TGATTCATCT TTAGGCCAG GGGGAACACA ATGACTATCA TTAGTGATGC AGACCTGGCT

SEQ ID NO:220: (Length of Sequence = 382 Nucleotides)

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TTTTTGT TTTTAAATAT TTTTGATATT CTCTTTCAT TGAAATGGTA TAAATGAATC CATTAAAAA GTGGTTAAGG  
ATTTGTTTAG CTGGTGTGAT AATAATTTTT AAGTTGCAC ATTGCCCAAG GCTTTTTTTG TGTGTTTTTA TTGTTGTTTG  
TACATTTGAA AAATATTCIT TGAATAACCT TGCAGTACTA TATTTCAATT TCTTTATAAA TTTAAGTGCA TTTAACTCA  
TAATTGTACA CTATAATATA AGCCTAAGTT TTTATTCATA AGTTTTATTG ANGTTCTGAT CGGTCCCTT CAGAAATCTT  
TTTATATTAT CCTTCAAGTT ACTTCTTAT TTATATTGTA TGTGCATTTT ATCCATTAAT GT

SEQ ID NO:221: (Length of Sequence = 314 Nucleotides)

GACTTTGGTT TATTTAAAAA ACAAGCCAAA AAAAAA AAAAACCCCA ACTTTATATA CAAAGTCAAA CTGAAACCAC  
GGWTTATGGA AAGAGGCAAG AWTATGGGT AACAGGGGAG AAGGCTGGGC CAGAGCCAAT ACCCATTTCT GAACACAGGA  
GCCACGGGAA AGAGGTGCTG GTTCTCTCTG GCAAGACCGG GGTGACTGGA ACGCAGTGGT CCTACTGGCA AACCAGCCC  
AACACTGAGC TCTTTCTAGC ATGGACTCCA TTCCCGTGAT TGGCCAAGGG AGACCCTTCC CCCAGGAGGC CTGT

SEQ ID NO:222: (Length of Sequence = 342 Nucleotides)

TTCCTTCTCT GCGGCGGCAC GTCGCNAGCA GCCTGCTTCG CCCCGTCTGC AACTTTGAGC TGGAGGAGAA GCAACTTTGG  
CAGTGGCCGC GGGGTGGGAA TCCCGTCTCT CCTCGGCAGC AGTAGGCTCG CAAGTCGCTG GGGTTAGGTG GGGCAAGAGT  
TTCGCCGCG CATCAGCGCT TGCTTCGGAC TGTTTGCAAC TGTTTCCAG CGAGCTGGGA GCGGGGGTTG TGAAGTGGAG  
TCGTCTGGGG GAGGGGGACT TGTCTTCTCT TTCTCTAGA GACCTCGGCT TTCAACTGGA TCAAACGTG TCGAAAGGAT  
GTAAATAGGC AAGAGCAAC TG

SEQ ID NO:223: (Length of Sequence = 376 Nucleotides)

GIGATGGCTG CCTTGAGGGG GACCATCATG TCGGAGACGC ATTGGTGAG GTCTCACCCC ACAGCCCATG CCCAGCCTCC  
TGCAGACTCA GGTATCCAG CTGGTCGATG GCTCTTGCA TACCTGGTGC CTCTCTCTCT CCGGCTTGGC AGGCTTCTCT  
GGGGCTTCT CAGATGACTC TTTTGCCCTC TTCTCTGCT TGGCTAACTC CTGCGCCAGC TCTGAACGTG CCTCTTGGC  
TCCCTCTCT ACCACCTCT CCCGTTTGGC CAACTTGCTC ACGCCCGTCT TGGTAGTGGC TTTGAGGCTC TCCTTGCTAT  
CAGCCCGCTG TTGATTTTG CTGGGCTTGA GGTGGTAAAG GCACAGCCCC AAGAAG

SEQ ID NO:224: (Length of Sequence = 445 Nucleotides)

GTGATAGAC ATTGGCATTG GGGTTGCTTC CACCTTTTGG CTGTCATGAA TAATATTGCT ATGAACACTA ATGTACAATT  
CTTGCCCTGA ACGTAAATGT TTTCATTTCT CTGCGGTATT TATCTAGAAA TGAAATTGCT GTATGTTAAC CCTTTGTTA  
ACCTCTTGAG GAACTGGCAG ACTTTTCCAA AGCAGCTGCA CCATTTTAAA TTCTAACCAG CAGTGTTTGA GGGTTCCAAT  
TTCTCTATAT CCTTGGTAACT ACTTGTTATC TGCCCTTTTG GTTAGAGACA TCCTAGTGAG TGTGAAGTGG CATCTCACTG  
TGGTTTGTAT GTGCATTTCC CTGATAGCTA ATTGTGTGGA TCCCTTTTGC TTTTAGTGGA ATGAAATATC TGGTAGTCTC  
GTATGCCAAA CTAAAGCTAA AATTAAATG ACTCTGCATG ATGGA

SEQ ID NO:225: (Length of Sequence = 403 Nucleotides)

TGCTCTCGGG ACAGTTTCCC GGGCAGCTCC TGGCCAGCTT CCAGCCGAGA GTCTCAAGT CCAGGGCACC TTGGGCCCCAG  
CGCAGGAGAA ATCCGAGGTG GTCTGGCTC TACCTGGGC CTCCTACTCC CCAGCACCCC TGGAGGAGGC AGGGGCTCCC  
CGCCGCGAG GCTGCTGCC CTAGGCCAC CTCTGCATG TGCTCATGGG GCCACCTGC CTCTGGGCC CTCCTCTGC  
CTAGGGGAGC TGGGCCAGGC ACTAGCCTTT GCCAGGGAG GTGGGCTCA GGCTGCCAG GTGCTGCAC CCCAGCCGGG  
CTTCTCTGGG GCCTCCCGT CGTCAAGCCT ATATCTGTC TGTCCCACC CCAGCTGTC CTGCCCAGG GACTGGCATA  
AAA



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SEQ ID NO:226: (Length of Sequence = 440 Nucleotides)

GTGCCTTAAG GAGAGAGATT GTGTTCTTCC TCTCTCAGGG GTGATAACTC AGGAAGCCTC TGGGTTGGGA AGACCATCAG  
TTCTTTTGTG TTAGGTTTCT TTCTCTGTCC CTCTTCCATC CCCAAGATGT GACCCCATAA AAATTTTTC TTAGTTGGCC  
AGGCATGGTG GCTCACGCCT GTAATCCCAA CACTTTGGGA GGCTGAGGCG GGCGGATCAC GAGGTCAGGA GTTGGAGACC  
AGCCTGACCA ACATGGTGAA AACCCCATCT CTACTAAGGA TACAAAAATT AGCCGGGTGT GTTGGCACAC ACCAGTAAAT  
CCCAGCTGCT CAGGAGGCTG AGGCAGGAGA TTGTCTTGAA CCTGGGAGGC AGAGGTTGCA AGTTAGGCCG GGATTGCGCC  
GTTTGTACTC CAGCCTGGGC AAGCAGAGCA AGACCATCTA

SEQ ID NO:227: (Length of Sequence = 426 Nucleotides)

GACCAAGAAG TTCCGGTTG AGGAGCCCGT GGTTCCTGCT GACCTGGAGC ACCAGACAGN CCACGGGCAG TGGACTCAGC  
AGCACCTGGA TGCCGCTGAC CTGCGCATGT YTGCCATGGC CCCACACCG CCCAGGGTG AGGTTGACG CGACTGCTG  
GACGTCAATG TCCGCGGGCC TGATGGCTTC ACCCGCTCA TGATCGCTC CTGCAGGGG GGCGGCTGG AGACGGGCAA  
CAGCGAGGAA GAGGAGGAAG CGCCGGCCGT CATCTCGAC TTCATCTACC AGGCGCCAC TTGCCACAAC CAGACAGACC  
GCACGGCGA GACCGCTTTG CACCTGGCCG CCGTTACTTA CGCTCTGATG CCGCAAGGC TCTTGAGGCC AGCGAAGATG  
CCAACATCAG GCAACATGGG CGAAC

SEQ ID NO:228: (Length of Sequence = 278 Nucleotides)

CAGGACCAGG AGAAGATCCT GGAAGATGCA GTGGATGAGT GGACGGGCTT TAACAACAAG GTTAAAAAGG CCACTGAGAT  
TGTTTATAGAA AACCAACAGC AAAACACTGA CAAGGTACAT AAATACAGAT TGGACATTTT AGGGTAAATT CACTGTATTT  
CCTACTTGCT TGTAGGAAAC CGAGTAAAGT GGAAAAGCTG TCCTGATCAT ATGGCATGCA CACCAGACTG CAAAAGGNCG  
TCCACACTAT TTAACAGGAC TGTGGCAAAA TAGCTTTA

SEQ ID NO:229: (Length of Sequence = 425 Nucleotides)

TTTTTGTTC CAAGCCTTTG TGAATGACTT TAAATCTCT CACCTGCAGA ACAGAGATGG CTTCAAAGTG GGGAGTGAGG  
GAGTGAGCGA GGACCCTGGG CTGAGACCTG TTTTCTTCC ATTCTGCTG TGGCTTCCCA CAGCTCCCTG GTTCCACACC  
AGGCCCTGCT CTGCCGAGA AAATGGATTC CCAGGCCACA GAGCTGTGAG GCCTTTGACT TTGCAGAGAC CAAGCACCCC  
AGAGGCTGTG CGACASGGCT AGTCCCTGGT GGGCCGCTCT GGGGCATGGG GGGCAGGGAG ACTKGGAGAT GGGGAGGGCG  
TTGAGAATCC GGGGGGTCCT GGATACTTGA CAAATTGGCT CAGGCTTAG CTYTGTYTGC CCCACTGATT GTGTTGCTTG  
GCAAGGTGCA AGTYTTCGGC TGTTT

SEQ ID NO:230: (Length of Sequence = 382 Nucleotides)

TTGGAGGATG TGCTGCCCCT CTGCGAGCAG GCOGACGAGC TGCACAGGGG TGATGAGCAA GGCAAGCGGG AGGGCTTCCA  
GCTGCTGCTC AACAAACAGC TGGTGTATGG AAGCCGGCAG GACTTTCTCT GGCGCTGGC CCGAGCCTAC AGTGACATGT  
GTGAGCTCAC TGAGGAGGTG AGCCAGAAGA AGTCATATGC CCTAGATGGA AAAGAAGAAG CAGAGGCTGC TCTGGAGAAG  
GGGGATGAGA GTCTGACTG TCACCTGTGG TATGCGGTGC TTTGTGGTCA GCTGGCTGAG CATGAGAGCA TCCAGAGGCG  
CATCCAGAGT KGCTTTAGCT TCAAAGGAGC ATKTTGACAA AGCCATTKCT CTTCAGCCAG GA

SEQ ID NO:231: (Length of Sequence = 398 Nucleotides)

GAGGCTGGAG AATCGYTTGA ACCCAGGAGG CGGAGGTTGC AGTGAGCCGA GATGGCGCCA TTGCACTCCA GCCTGGGCCA  
GAGCAAGGTT CCTTCTCAA AAACCTGGAA ATCTGTGGG AAGTAGGGGG AGGGCAAGGT TAAACCTAT GCAGGTGTGT  
CAATTAGACT TGTCCAACT TGAGAACCTG AATTTTGCAT GTAATTGAAA TGTTCCAGAA CAAGTCTGGC AGTTTCATAA

GGGAGTTTTT AGATGCCAAT ACATTGCAGA TAACCATATT GGTACATTA GGGGAATGAG CATGGGATAG GTGCCTCCCA  
GTTGGTAGGA TAGCATGAGG AGGTTTCAA AGTAACCSCT TTAAGGGTTA TGTCCAGTAT TTGCTAAGTA ACCAAGGT

SEQ ID NO:232: (Length of Sequence = 272 Nucleotides)

GGGGCTGCAG ACTGAGTTAT TTTATTTTCG TATTTCCAGT TTGAAGCTAC TATCATGGGC GTTTAGAGTT ATACAAATGA  
CACTTACAAA AAATAAAGA CCAAGACACC CAGAGTGAGA TGCATGTTGG GGACGGGGGA GGCTGGCAGC AGGGGGGCCC  
CGGCGGYTCA CCCCAGGGCT CCGGAGGGG CGACGCCTGG CTTCATCCAC CCGGGAGGCC CAGGGAGCAC CAATCACAGC  
AGGGGCTCTG GCCCAGGTGT CGGCAGCCCA GG

SEQ ID NO:233: (Length of Sequence = 364 Nucleotides)

ATTTTACAGT TTTATTTTTA AATCATTTAC ACATATTCAT ACAAAGAAAA ATAAATTTC AAGATGGAATC CTGGGGACCA  
TGGTAGTTTA AAAAAAATA TCTCTCTGAT CATTAGCTAC TAAAGACANG GCAAGAGGCT TAGCAGTCAT TTCTGGGGGT  
TAGTGTATCT CCCCATGCAG GGGACAACCTG NGAAGAATCC AAGCTGCTCC CTCATCTCC TTCGATCTAG ATGGGGGAAG  
GGGATTTTCC AATGCTCTCC CCTAGAAACA TTTCAAGAAG TACAGCAAAG GCTTATGGTA AACTGGAAC CTATTGCTA  
GAAATCTGGC AAGATTGCAC TTTCTGAACC CAATTTCTCT ATAA

SEQ ID NO:234: (Length of Sequence = 217 Nucleotides)

GGCCAGGAGC CAGAGGGCCC CGGGGCCACC CCTGCGGGG AACGTGATGA CCAGAGTCCA GACAGTGTCC CAGAGAGGCC  
GCGGCCCGCA GACCGGAGGC TCTGTCTGCC CTNCGTGGAC GCCTCGCCAC TCCCAGGGAG GACGGCTTGC CCGTGGCTGC  
AGGAGGCCAC GCGGCTCATC CAGGAGGAAT TTGCCCTTGA TGGCTACCTG GACAATG

SEQ ID NO:235: (Length of Sequence = 221 Nucleotides)

AACTTTAAAG TTAGGATTTT AAAATATTTG TAACTGGCTA AATTTTAAAG TCGTGACAAA TAATTACTTA GTTTCAGAAA  
TATACACACA CTACTCTTT AGCCAGTTTC TTTCAAGGTT TACTGTCCC ATCAGATATC TAGCCATTTK CCTTTGCAAA  
TTACATACCT TCTTAAGAGT GTATTTTAA GATTATTACT TATGCTTTAT GATGATATAG T

SEQ ID NO:236: (Length of Sequence = 221 Nucleotides)

ATAAATGGGT TTCTACTCC TTAGGGACAC GATTGGAAC AATACATCCC ATGAACACAG GTGAATGTCC CTGGTTATCC  
CTGAGCTGGG CAGTTTCACA CAATCANITT TNCTCTGAGG CCAAAGTCTG TGGTTTGATC ATCTTAGCAG CTTCCAGAAC  
AGAAAGTAGG TTTACTTTGT CTCCAAANTC TNATTCTCGG TGCTCAAAGA AGAATGACCT G

SEQ ID NO:237: (Length of Sequence = 251 Nucleotides)

GACATCTTTC TAAGATTCTC TGTTGGAAAA TGACTGTCAA TANAATGCGG GTTCTGGGC CATTGCTCTT ACTTTTATTT  
TTTGATTACA AATTTCTCTT GACGCACACA ATTATGCTG CTAATCTCT TCTTCTAGA GAGAGAACT GTGCTCCTTC  
AGTGTGCTG CCATAAAGGG GTTTTGGGAA TCGATTGTAA AAGTCCCAGG TTCTAAATTA ACTAAATGTG TACAGAAATG  
AACGTGTAAG T

SEQ ID NO:238: (Length of Sequence = 327 Nucleotides)

GTTCGTGGCT GTCACAATAA TGCTGTGATA ATGCTGTGGT TTCCAGCAG GGAGGTGGGA GCGGGGAGGG GGCTGCAGCC  
TGATGAGAGC CAGCTGAAGG AAGAGCTGCC TCTCCCTTCC TAAGCCCTT CCAAGGTCT GCCCCACCG CCAACCAAA  
GACCACTCCG AACAAAGTGA GGATGTGGAT GCTCTGCTG GGTCCGCTGT TCCGAGAGG GAAAGAAAGG GTAGCTGCAC

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TGACCCCACT GTCCCATAT ACAAGGGTTK GGGGGCAAGA GCATGTGGCT ACTCCAGCA AGGGRAAAAT GGGAGGAGCA  
GTAGAAA

SEQ ID NO:239: (Length of Sequence = 285 Nucleotides)

ATTATTAGTT TATGGTGCTT TAAACCTATC AAAATAGTTG TAAGTAAATG GATTTCTTGT NCTCCCAATA ACAATTCTCT  
GAGCTAGGAT AGATGTCTTT CTGGCCATTT TACAGGTGAT GACACTGACA TAGGGACTGA GTGGGTAGCT TAAGTNCAT  
GGTTACCAGG AGCAGGACCN ACGTTTCCTG NCTCCAGTC TCATCTGT TTCCACTGAC CAGGTTGGTT GCTCCCTTGG  
AAAGCAGTCC CTGAGAGTTG ACTTAGAAGT TCAGGGNGAA GAGGT

SEQ ID NO:240: (Length of Sequence = 349 Nucleotides)

TTTIGCCATG TTGGACAGGC TGATCTCAAA CTCCTGGCT CAAATRATCT GCCCAGCTTG GMCTCCCAAA GYGCTGGGAT  
TACAGATRTG AGCCACTGCA CCCAGCCTGA CATGCCATAG TTTCAGCAIT TTCTTGGGCA ATGATCCAAG CTGAAGGCTG  
GTCTGAGGGA TCTSAAGAAG CGTATGAGTT GGAAGAGAGG GACAGAAAGG AAGAAGACAT GTGAAGAGAG AAAAGGAAGG  
AAGCTAGCAG AGGAATGCC TCCAATAGAG ACTGCTGCCT GAAGCTCAGC CCCTCTGAAG ATAGGTAGGC CAGGCTGGCT  
TAGCTGAGGC AGTGGGTTAG ACCAGCCCT

SEQ ID NO:241: (Length of Sequence = 233 Nucleotides)

GTGACCGGT CTGCCTTCAT CTTTTAATGG CCGGTGCGT ACAGTTAGTG GACAGACGGG GGATGGGACA CAGCAGGGGT  
GAAACAGGGC AGTCACAGCC GGGGCCGGGG ATCTGGAAGC GGGGGCGGTC CTCCCCCTGG AAACACCGTN TCTGGAAGGA  
CACCCCTTAGG ATCCCTGAC CTCARGGTGC CACCCACAG GGCCTGGTGT TCTGGGAGGC CCGGCTKGAG TGA

SEQ ID NO:242: (Length of Sequence = 372 Nucleotides)

ATATGIAC TAATTGGTGG AATACGCATG TACAATCTT CAAAAATAGT AAAGAGCAAA ACAACAAAA AATAGTAGAA  
GCACTGGAGA AATACACTAT GGCATAAACT AGTTACGGGT GGGATGTAC ATGGACCATA TCTACACTCT GTGGCAACCT  
TCTTACCTGA CTCCAAAGGA TCAGATAATC AACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT  
CCTAAGCAIT TTATTTTAGC TCAAAATATA AAAATATTCA TCAGTTAGCC AAGCTTTTGN GATGAGAGAT CATAGCCTCC  
TCATTGATAG GGGGTTCTT GGGTTTCCTT GATTCATGT TTCAGAGTTT TT

SEQ ID NO:243: (Length of Sequence = 256 Nucleotides)

CTCACACATT CATACCCAAG GAAGAGGCAA ACACACTCAA GTCCAGAGTT CCCAGTGGTG CCGCCAGAC CTACTGTCCC  
GGGGGTGTTA TGGCTGTCCC TCGGCTTCCC CAGAGCAGCC AGGACAGCCT GCACCGNCTN CCAGACTCTC GCAGGAAGGG  
GAGCTCTGCC CTGGGGAGGA AACTNACAGG CTGGGAGACA AGACTCCCAT CGCAGGGACA TGACAGCAG CAGCCACAGC  
CCCGGGACG GGGCAT

SEQ ID NO:244: (Length of Sequence = 220 Nucleotides)

CAAATGGCAG TTCTCGAGAA TCGACGAGGA ACTTAAATCT GGACTCAGGG TTTCACTGCG GTCTCCGACT CCCACCACCC  
CGCCCTCCG NCTGTCTCGC CGCCAGNGT GACCTCCAG CGAAGGAATC TTCTCCGAT GGGTGCACCT TGCCAANAGG  
TGTTGCACCT GGNGACTAG GAGGCGCCTC CANACTAAG GCGCTCANTG CGGCGTTCTT

SEQ ID NO:245: (Length of Sequence = 239 Nucleotides)

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TTCATGCTCA TGTAACCTTC TTAATAGTGC CTTGTCIGCT GGGTTTGTAG CTGTAAGAGT TCTGCAAACCT GGCCCTATATA  
AAATATTGAT GCTGTCCATT AAAATGAATC TCTCTCTCTC ACTCAGTCTC TCTCTCTGTC TGTCTCTCTT TCTTCTCTCT  
CCTGCCATGT GTGTGTCTCT CTCTACTCCT CTGATTTTGN CCTCTCTCTC TATTCTGCTA CTCTCTCTCC TCTCCTCCG

SEQ ID NO:246: (Length of Sequence = 269 Nucleotides)

GGTTTCACCA GCGTTTAATG TGCTCTGATG TTGACCGTCC CTCINAGTNT TCTGGGGAGG AGGGGGTGGG GCGGAGGGTC  
AGGAAAGCAG GCTCAGCTTC CAGGGTCAGG GAGTTGTGGG CCCAGAGGGG CTGTACAGT GGATGCACCC TGCCCCCTCC  
CTGCCAGAC CCGAGGGTAG GGCAGAGGCA CCTCCTCGNC AGCCTNTGGG CTGCACCCAC AGGGAATNGA GGGGAGGGGC  
ACCATTACCA CTGGACCCAC CAAAGACCC

SEQ ID NO:247: (Length of Sequence = 297 Nucleotides)

CTATTCAAAG TTTACTGACC TCCCCAGCCA GGCAGGCCAA CCCTTCGAG CAGGGGAAAT GTCCATCTAG CTGCCCTCTG  
CTGGGTTGCA GCCTATGCCA TGAGAGGGTA CTGGAAGCAG GAGGGAGCCC TGGCTAGGGC AGGCCTTAAA CGCAAGGGAA  
GCTGAGCAGA GATCTGCACA CTCAACCCCA TTTGATATTC TTCTCCTCCT CAGTCATGGC CAGCGTGTG GTGACTAGAC  
CGGTGCCAAT AGTCCGGTTG CCATCTCGCA GGGTGAAAAG ATGGCCTTTC TCTTAAG

SEQ ID NO:248: (Length of Sequence = 281 Nucleotides)

ACAACAAGCA CACCAACTAT ACCATGGAGC ACATCCGCGT GGGCTGGGAG CAGCTGCTCA CCACCATTC CCGCACCATC  
AACGAGGTGG AGAACCAGAT CCTCACCCGC GACGCCAAGG GCATCAGCCA GGAGCAGATG CAGGAGTTCC GGGCGTCCCT  
CAACCACTTC GACAAGGATC ATGGCGGGGC GCTGGGGCCC GAGGAGTTCA AGGCCTGCCT CATCAGCCTG GGCTACGACG  
TGGAGANCGA CCGGCAGGT GAGGNCGAAG TTCAACCGCA T

SEQ ID NO:249: (Length of Sequence = 383 Nucleotides)

AGCGCATCCA CACCGGGGAG CGGCCCTACC CTTGCTCTTA CTGTGGCAGG AGCTTCCGCT ACAACAGAC ACTCAAGGNC  
CACCTCGTT CAGGCCACAA TGGAGGCTGT GGGGGTGATA GTGACCCATC AGGTCAGCCA CCAACCCAC CAGGTCCCCCT  
CATAACTGGG CTGAAACTT CTGGCCTGGG TGTCAACACT GAAGTCTAG AGACCAACCA GTGGTATTGG GGAAGGGAGT  
CGAGGGGGAG TTTTGTAAAT CCAATCTCT GTGGNTTCAT GCTTTGTATA TGCTCAGAGC AGGGCACAAAT AATCCAAGAG  
AAGTCTGTG AGCCCNATC CAACACCCAC AGTAATTATA ATCTTGGCAC ATCAATGGAA TTT

SEQ ID NO:250: (Length of Sequence = 397 Nucleotides)

GTATCCTACG TTACAACAAT AATATCATGG GAGAAATAGA AATAGCCTAG TTTGCTTCCA ATAGAAACTG CTTTTAACAT  
GGGCTGTATA TAAAATATT AAAGAGAAAC AAAACTGTAC ATTTCTCTCAT TGCTCCGCTA CAGACAACCC ATGTCATAAC  
CTTGTGCAA ATATTTTTCT CCTATAGCAG TAAGTACAGC ATTAGAAGGT GATTAGAGAG TCTGTTGATG AAACACAAAT  
GIATGTTTTT AITGATTTTT ACTTTAGAAC ACTACAGAGT TCCTGGGACC GGGGTGAANG GCATTTAGCT GGGGTGGTTT  
GTGTGGGGGT TAAATACCTT CCCACTTGCA AGTGACTTGC CTGTNCCCGC TGCGGGAATC CTGTNCTTGG GTTGGGA

SEQ ID NO:251: (Length of Sequence = 276 Nucleotides)

GGCCATAAAA GAAAGAGCCT GTTACCTATC CATAAACCCC CAAAGGATG AGACGCTAGA GACAGAGAAA GCTCAGTACT  
ACCTGCCTGA TGGCAGCACC ATTGAGATTG GTCCINCCCG ATTCGGGNC CCTGAGTTGC TCTTCAGGNC NGATTTGATT  
GGAGAGNGA GTNAAGGCAT CCACGAGGTC CTGGTGTTCG CCATTCAGAA GTCANGACAT GGACCTGCGG CGCACGCTTT  
TCTCTAACAT TGTCTCTCA GGGAGGGNTC TACCT

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SEQ ID NO:252: (Length of Sequence = 314 Nucleotides)

CCTGAACAGT CTGTTTCATT TGA CTGTTG GGGGTCTCCC AGTTTAAAGCA AGATATTTAA GCCTTATTTT TCTTGGCATG  
CTTGGATTCC CCAGTAAAAA AAACCTCTGC OCTGGGCTGA CAATCAAAGT TCTGGGAAGT AATATGGATA AGCAAGCTGG  
AAATGGAGAA GGCTATTTCAC TGTCCTGGG TCTACTGTT TTCTGGNTGG GAACTGCTTT TCCATTAGGC CTGGTGTGCC  
CTGGAAGGGA NGAGCCTCTT GCAGAGACTA CAATCTTGA TGGGTCTTT GCCAAGTTT AAGGTAGGAA CCA

SEQ ID NO:253: (Length of Sequence = 293 Nucleotides)

GAACACTCTG CTCAGCCAA GGTGGTGAGG GCAGCTGTT CTAACAGCG CAAAGGCAGC AAGCCACAGT CCCACAAGCC  
TCAGCCTACC CGTAAACTGC CACCAAGAA GGACATGAAG GAACAGGAGA AAGGAGAAGG GAGTGATAGT AAGGAGAGTC  
CAAAAACCA ATCAGATGAA TCAGGGGAGG AAAAGAATGG AGATGAGGAT TGCCAGGAG GCGGGCAGTA GAAGAAAGGA  
AACAAACACA AGTGGGTTC ATTACAAATA GACATGAAG CTGAAGTGCC CAG

SEQ ID NO:254: (Length of Sequence = 413 Nucleotides)

CTTTTCTTA ATATATTAAT ATTTACCAAG GCAAGACAGT GATTTATGGA CATTTAAAT AGTTTAGCTT TGTCTGCTG  
TTCTAAAACA TTGTGACTG TCTGATAGAC TTTTAAAAA CAGTGCTTTT CCAGGATGAT TTATGATATG CAGTATTGTT  
TATAGATGCC CATGGCTTAA CCTGAAAAG TCAATTAAGT GACACAATTA AGAGAGATAT GAATAGTGGT AGAAAAAGCA  
TGTA CTCTGG ATAAGTGGG GTAAATCTAG TATTTGTTAT TCTGTCACT AATATTGTCA NTAGTATTTT TTAGAAGGTT  
TAATTTTTT ATGGGTTATA AATTCATGTC ACTCTCTGC AATGGGTACC ATCAGTGGGA ATGCGGAAT TATCCATGCT  
TTGGGGGTTA AAA

SEQ ID NO:255: (Length of Sequence = 376 Nucleotides)

GGGTCCAGGG GAGAATCAAT ATATCTAGTA TAGTTTATAT TTGTACCTTC TCTCCTTAAG AGTTACAGTG AGTGACTCTA  
CTCCTCAAT GGAGCACCTC TCTCCAGGAG AGTAAGAAGA TCACATAAAT AGAAAGTGAG CTTTGGACTC TAACAGACAT  
AGGTCATAT TCAACTCTGC TACTTAATAT CCATATTGGT TTGAGTTATT TAACCTTGAC AATCCACACT GTAAAATGGG  
TAAATAATA ATACCTCCT CTCAGAAGTG TTACAAAGTT TATATGAAAT AATGTGCTTA AAAAGCTGGG TACATAGTAG  
GAGCTTAGTC ATTGTTTATT TTCTCCTCA TACCCATACA TGNITCATTC CTACTG

SEQ ID NO:256: (Length of Sequence = 241 Nucleotides)

GTAGAGATGG GCTCACTATK TTGCCAGGC TGGTCTGAA CTCCTGAGGT AGGAGGATCG CTTGAGCCTG GGAGACAGAG  
GTGTCAGTGA GCGAGATCA CGCCACTGCA CTCCTGCCTG GGTGACACAG TGAGACTCTG TCTTAAACAA AACAAAACAA  
AAAAAGGCCA GGCGCAGGGG CTCACACCTG GTAATCCAG CACTTTGGGA GGCCAAGGTG GGTGGATCAC CTGAGGTCAG  
G

SEQ ID NO:257: (Length of Sequence = 406 Nucleotides)

CAAGGGTGTCT CTTGCCAGA TCACTGTAA TGATTTGCCT GTGGGACGCT CCGTGGATGA GGCTCTGCGG CTGGTCCGAT  
TAAGAAAACC AAGAGAGGCC GGGCAGGTG ACTCAAGCCT GTAATCCAG CACTTTGGGA GGCCGAGGTG GCGGATCATG  
AGGTCAAGGAG ATTGAGACCA TCTGGCTAA CACAGTGAAA CCGGCTCTCT ACTAAAATA CAAAAAATT AGCTGGGCAT  
GGTGGCACGC GATTGTAGTC CCAGCTACTA GAGAGGCTAA GGCAGGTGAA TCGCTTGAAT CCAGGAGGTG GGGGTTTCAA  
TGAGNCCGAG ATCGTACCAC TGCACTCCAG CCTGGGGCAA CAGAGTANGA CTTGTAAACC CCCAACCAAC CCNCCAACCC  
CCCGCC

SEQ ID NO:258: (Length of Sequence = 157 Nucleotides)

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GAAAAGAAGG AAGGAAAGAG GGGAGGGAGG GAGGAAAGGA GAGAGGGAGG GAAAGAAGGA GAAAATGCTG GAGCAAAGGA  
GGTIGGTTAC ATGATTTCTC TAATGGCAAT GAGCTGCTTT CTGGATGAAA TACAGAATCA GAGCGAGACT CCGTCTC

SEQ ID NO:259: (Length of Sequence = 361 Nucleotides)

AAGCAGATAT AAATGGGACC ACTGTGAATC AAAGGGGAAA AATTCCAGGA AAAAAAATT CCAATAGCTT CACAGTTTAA  
CTGAGGTTTT GGAAAACTT AAGTGAATTC AGCTGATGTT TGAAATATCT GTCTACATTT AATTAGATGT GTTGTATTTA  
CCAAGGAGGC ACAAATATGT AGTTCTGTAG ATTTTAATAC TAACTTTTCC AGTAAGAAAA ATAATACCAG GTGATTTCAA  
AAAGGGCAGT GATCTATAAA CACTCAAAAT GCATCTTTGA ACAGGGGAGC AGAAATAGCT AATTTAATGA AAACAAACCT  
TAAGCACTTT ACTTGGCTTC TAATAAGGCA TCCCAAGAAA A

SEQ ID NO:260: (Length of Sequence = 349 Nucleotides)

CAATACATGT ATACAGTGTA CACTGATCAA ATAAGAGTAA TTAGCATATT TATCACCTCA TTTCTTTTGT GGTGAGAACA  
TTTAAATCC TTCTTTTTG CTATTTTGAA ATATACAGTA CATTGCTATT AAGTATAGTC ATCTGGCTGT GCAATAAAAC  
ACCAGNACTT ACCCTCCTG TCTGTGACTT TGTACCTGT TCACCACCCC TCCAATCCTC TAGTAACTAC CATTCTACTC  
TCTACTTCTA TGAGCCTGAC TTTTAAAT TCCACATGTA AGTGAGATTA CATGGTATTA TTCTCTCNGT GGCTGGCTTA  
TTTCACTTTA ACATAATGTC CTCTAAATT

SEQ ID NO:261: (Length of Sequence = 415 Nucleotides)

GGAAGATGAG GATCTAGGTG TGAGCGTGCA GAGCCCTGAG GCTGGGCAGG CAGGGAGCTC TGCCCTGCACA ATGATGTAGC  
CATGTGTGGC CACACCAGCA CTGGGCAGCA CCTCTGGGGA GGGGGCAGG GCAAGGACAA CTGGAGAGAC AAAGCCAGAT  
GGGGCCACGT CCTTAGAGT GTGTGTGCAC GCACATGTGT GTGTGTGTGT GTGTAATACG CAGGGCAGAA ACACACCATG  
TAGGTCAGGC AGGACAGAAA CACATCATGT AGGCCAGGCG TGGTGGCTCA GGCTGTAAAT GCCAGCACTT AGGNAGGCCA  
AAGTGGGCGG ATCACCTGAG GTCAGGAGTT CGAGACCAGC CTGGCCAACA TTGCAAACC TCATCTCTAC TAAATTTCTA  
AAATTAGCCA GCGT

SEQ ID NO:262: (Length of Sequence = 382 Nucleotides)

GGCATGGGGT CTGGCTTTAA TGIGTAACTG ACGTGGGTCA CTGAACTGT TCAGGCTGAT CTGAACTCC TAGGCTCAAG  
TGATCCTGCT GCCTTGGCCT CCCAAAGTGC TGGAATTACA GGAATGAGTC ACAGCACCCA GCCGGCTGTG TTTGTTTTTT  
TGTTTTTTAC CCCGACAGGT NCTCAGTCAG TCGTTAGCTG GAGTGAAGTG GCGTAACACA GCTCACTGCA GCCTTGATCT  
CCTGGGCTCA AGTGATCCTT CCATTTCTTC CTTCCAGAGT AACTGGTACT GCAGGCCAC GGCACCACAC ATGGCTAATT  
TTTAAATTTT GTAGAGACGA GGTCTTGCCA TGTTTGCTCA GGCTCCAGCT GTTGTATTCT TT

SEQ ID NO:263: (Length of Sequence = 447 Nucleotides)

TGTATCAACT CAGAATTTCC AGAGAGCTCT TCCTGGCTGA AAAGATGTCC AAGGATCATC TCCGGAATGG AAGAGGTGAG  
GCCTGTTAGC TTGTGGGCTG CCCAATCCAT CCAACCTTG GCATTGGGAT CAATGTTGAT GAGGACAAGA CCTTCAACAG  
TGTCGGGGTG GTTAAGAGCA TATCTCGCCA GGATGTAGGC TCCAGCTCCA ACACCAACTC CAATTATTGT AGAGAAATTT  
AGGTACTGCA GGACGCAAGG GATCATGTCT GCAAGCTGGT CCAGAGATGG GTACTGATAT CCCAAAGGGA ACACAGGGGC  
TCCCTCTTCC ATTCCAGGGG CATCCACATG GACCCGCACA AAGTTCTGAA TGATTTCTCG CATGTCTCTG AACTKGAACA  
GTGGCTGGAG GAAAGATTTA TAGTTGAGTC CACATCGGGT AGGTAAG

SEQ ID NO:264: (Length of Sequence = 317 Nucleotides)

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TTTTCGCTGT CAACAGACAG TTTATTCTAT ATACAAACAC AATTTTGTAC ACTGCAATTA AATAGAATGG AATGAGCGCT  
 CCTCCGCAAT CCTCCCGAG TGACTGGTIT GGCCGCGGC CACTCCATCC CCGAGTGGGA CTGGACCACG GCCCTGGNTG  
 CTGCCACTGA TGTTGGNGCC TGCACCCAC GTCCCTATGC CCGAGGCGCA ANTCTGCTCT CCCGGGGACC CCAAGNCTGG  
 NGCACACGCG GGGAGGGCGG GGCCATGGAG AAGGCACTGC AGGGAGCACC AGGCAGAGCC GTGTTGAGGC CGGCCGG

SEQ ID NO:265: (Length of Sequence = 270 Nucleotides)

GCAGAGCAGG TGGAAGTGAT CAGGAACCAT AGTIGACAGT TCCAATCAGT AGCTTAAGAA AAAACCGTGT TTGTCTCTTC  
 TGGAATGGIT AGAAGTGAGG GAGTTTGGCC CGTCTGTGTT GTAGAGTCTC ATAGTTGGAC TTTCTAGCAT ATATGTGTCC  
 ATTTCTTAT GCTGTAAAAG CAAGTCCTGC AACCAAACTC CCATCAGCCC AATCCCTGAT CCCTGATCCC TTCCACCTGC  
 TCTGCTGATG ACCCCCCCAG CTTCACCTCT

SEQ ID NO:266: (Length of Sequence = 297 Nucleotides)

ATGAGGCGAG GCCTGCGAAG TGGCTGGCAT GCAGCAGGTG CTAATGAGTG TTGCAAAGGT GATGTCAAGC AGGCAGCTTC  
 CCGTGGCCAG AGAAACATTG CAGAGAAGGG ATAAGTAGGG CTTAGTGACT TTGACGGGTC AATGGAAGAA TGACCCAAAG  
 AAGGCTTCAA GGCCAGGCCT GCAGTTCTCC ACCACAAAGG CCCTCACTGA TAGCACCAC TCCCCACAC TCAGCTTNG  
 GGCTAGGTC TGGGTACCC AGCTAGAAGC CACAGGACCC TGAGGCGTCC GAGGGGT

SEQ ID NO:267: (Length of Sequence = 387 Nucleotides)

CTTGTTTTCA TCATGAGCTC GATCAGATGT CTCTCGATCT TCAGACTGGT GGTGTCCTAT AATGTCTGT GCACGCATTC  
 TTGAGCTTTC CAGGATTTCT GTCTGTCTC TCTGTTTATC TACAGAAGAA ACTTTCTCCT TGAGTTCCTG TTCTTGTAG  
 CGCCTTGAAC TCTCTTCTCT TTCTGGTTTA CGATCCTCCT CTTTCCATCT ACCCTGTCTG TCTTCTGTGA GGTGCGAGGG  
 ACTAAGAGAA CGAGATTCTT GAGGTGCTAC AACTTGCTC AAGAGTCTGT GTTTTTTCAT TTTTATCAT CTCCACTGTT  
 GTAGGCATCA CTGTCCGAG AATGTTCAAG CCGGCGCTTT CGGGGACTG TCTAGGGCTG GGACTCC

SEQ ID NO:268: (Length of Sequence = 318 Nucleotides)

CCTGAAGGTT ACCTCTTTGG AGAGAACATG GATCTGAAT TCTTGGGCG CCGCCCGTTC CAGTTTCCCT ACGTCACTCC  
 TGCCCCCAC GAGCCCGTGA AGACGCTGCG GAGCTGGTGA ACATCCGCA AGACTCCCTG CCGCTGGTGA GGTACAAAGA  
 CGATGCCGAC AGCCCCACCG AGGACGGCGA CAAGCCCGG GTGCTCTACA GCCTGGAGTT CACCTTCGAC GCGATGCC  
 GCGTGGCCAT CACCATCTAC TTCCAGGCAT CGGAGGAGTT CCTGAACGGC AGGGCAGTAT ACAGCCCCAA GAGCCCCCT

SEQ ID NO:269: (Length of Sequence = 422 Nucleotides)

ACATGTCIAT TCAGGTCTTT TGCCCATTTT GAAATAGCAT TGCTGTCTCT TTTGCTGGAT ATTAACCCCT TGTGAGGTGC  
 ACAGTTTGCA AGTTACCTTT TCTCATCTTA TAGGTTATCT CTTCACTCTT GATTGTTTCT GTTGTCTGTC AGTAGCTTTT  
 AAGTTTGGTG TAATACCAAT GTGTTTCTC TGCTGCCCTT TTAAGTTTCA CTGGGTCAA AGTTTAAAT TTGTGAATTC  
 CTATATTTTT AGGGCAATTC TCCTGCCACT GTTGGAAATTA TGCTCAATC TATGCAGTAG AATATTAGTG TGAAATGCTT  
 CTGTACCAAT GGAGATGATG CTGGATGGTC TCTATCATAA ACCCATACCT CATCAACACA AACTGCAATT ACACAAGGGC  
 TCTATATCAT GGATCTCCAT TT

SEQ ID NO:270: (Length of Sequence = 376 Nucleotides)

GAAGAAGAGC CCAGACCTAG GGGAGTATGA TCCACTTACC CAGGCTGACA GTGATGAGAG CGAAGACGAT CTGGTGCTTA  
 ACCTGCAGAA GAATGGAGGG GTCAAAAATG GGAAGAGTCC TTTGGGAGAA GCGCCAGAAC CCGACTCAGA TGCTGAGGTT  
 GCAGAGGCTG CAAAGCACAT CTTTCAGAAG TCACCACGGA GGGCTACCCC TCAGAACCCC TTNGGGGCTT GGAACAGAAG

GCGGCCCTCCT CCCTGGTGTG ATATGTGCGC ACGTCTGTCT TCCTGCTTGA CTTTGGGGAT CTCGATGATC CTGGTGCTCC  
TGTTGTCTTT CCTGATCCCC TGTCTCCCA GAGATCTTGA CAGAACTGGA GCCGCA

SEQ ID NO:271: (Length of Sequence = 346 Nucleotides)

TGTTACGTT CCCTTCTTT GTCTTCTTT TTCTATCTT TATCTATACT TCGACTCTC TCCTTTTCC TCTCTGTTC  
TTTACCTCA CCTTTATGCT TATGACTGTN CCCACTAAGA TTCCACGTT GATCATCAAT TTTACGNTA TCTGACTCC  
TACTGCGACT GGCACGATTG GTTCGTCTAT CCTTGAGCG ACTTCTACGA ATGCTTATGA AAAAGAATCA AGTTGGNCAC  
CAAATGTTT ATAGCAGTAG GAAATTTCTT TTAGAGACTT CTGATGGAA ATTTGAAGTG TATGTGCTA TCAGATCAAG  
TGCAGGAGAG GTATAAGGCT ACTGGA

SEQ ID NO:272: (Length of Sequence = 394 Nucleotides)

GTGTGTGTG TTGAGTCGGA GTCTCGCACT GTTGCCITGG CTGGAGTGCA ATGGTGCAAT CTGGGCTCAC TGTAACCTCC  
GCCTCCAGG TTCAAGCCAT TCTCTGTCT CAGCCTCTA GTAGCTGGGA TTACAGGCAC CTGCCAGCAC ACCTGGCTAA  
TTTTTTATAT TTNAGTACA GACAGGGTTT CACTATGTTG GCCAGGCTGG NCTTGAACCTC CTGACCTTGT GATCTGCCA  
CCTCAGCCIN CCAAAGTTTT TCAGAATTTT TTAAGGAAAC ACTTTTAAAC CTTAAGGCTT TCTTTCAAAC TCAGATCCCC  
TTACACAATT GATCAGACGT GGCAAAGTTT TGCTTCAAAG TTTTGGACT GGGTTTCCAC TTTAGGCTTA CTGA

SEQ ID NO:273: (Length of Sequence = 259 Nucleotides)

CAACCTGTAC CCAGGCTGCG AGAACGTRAG TTTRAGGAGC CGCAGCATGA TGTCGAGCC GGTCTTACC AAAGGRATGC  
TGGAGGTGTT TKTGGCCCCG ACCCACCACC CGCACTGCTC GGCGATGAC CAGTCCACCA AGGSCATCGA CATCCAGAAC  
GCTTATTTA ATGGAGTTGG CGATTCAGC GTGTGGGAGT TCTCTGAAA TCCTGTGTAT TCTGCTGTW ATTRACTATTT  
TGCTGCAAT AATCCCACG

SEQ ID NO:274: (Length of Sequence = 348 Nucleotides)

TCCAGTTGT CCCGATTGTA ACTCAAAGG TGGAATATCA AGGTGTTTT TTTCAATCCA TGTCGCCAGT TAATCTTGCT  
TCTTTGTTT GGCTGGGATA GAGGGGTCAA GTTATTAATT TCTTACACC TACCCTCTT TTTTCCCTA TCACTGAAGC  
TTTTTAGTGC ATTAGTGGG AGGAGGTGG GGAGACATAA CCACTGCTTC CATTTAATGG GGTGCACCTG TCCAATAGGC  
GTAGTATCCG GACAGAGCAC GTTTCAGAA GGGGACTCT TCTTCCAGGT AGCTGAAAGG GGGAGACCT GACGTACTCT  
GGGTAGGTT AGGACTTGCC CTCGTGT

SEQ ID NO:275: (Length of Sequence = 396 Nucleotides)

GTGTGGTGAA TTGGTCTGT GATAAAATG GAGTTCAAGA AACAAACAGG AAACACAG TGCCCTTCG CCCCAGGTC  
ACCGAGTGG CAGGGCAGTG ACCGCTGCTC TCAGGCTGCC CAGTGTGGAC CTGCTGTG GAATGCTCCT CCTCCAGTC  
CCCTCGCTCC TGTGTCCAG CCACATGCAC CTTCCTCTA CCTCTGGGAT CCTGCACCA GGTCTGCCCC TGTCTTCTCA  
GGGCTGCTCC TMTTGNCCA CAGGACCTCA GCTGGAATGT TGCTCTCTCC AAGAGGCCTT CCTGACTATT CAGCTCACAG  
TGGCCACCA GCCACAATCT GCCATGTGCT TTGGGGGATT GTCTGTAAAC TGGCAACATA CTGGCAGCCC ATAAC

SEQ ID NO:276: (Length of Sequence = 381 Nucleotides)

GGTGTGGGG AGGCTGCGCA AGGGGGCGAG CCGGGGCGC CGGCGCAACC CCGNCCCAG CGCACCCAC CGCCGCCCA  
GCAGCAGCAC AAGGAAGAGA TGGCGGCCGA GGCTGGGGAA GCGTGGCGT CCCCCATGGA CGACGGGTTT NTGAGCCTGG  
ACTCGCCCTC CTATGTCTG TACAGGGACA GAGCAGAATG GGCTGATATA GATCCGGTGC CGCAGAATGA TGGCCCCAAT



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CCCGTGGTCC AGATCATTTA TAGTGACAAA TTTTAGAGAT GTTTATGATT ACTTCGAGC TGGTCCTGCA GCGTTGATGA  
AAGAAGTGAA CGAGCTTTTA AGTTAACCCG GGATTGCTAT TNAGTTAAAT GCAAGCCAAT T

SEQ ID NO:277: (Length of Sequence = 206 Nucleotides)

TTAATAAGAC AGGGCTGGCG CCCGAGTAAT TCAAGCCCTT CGGAAGTGTC ACCGGCTGCC AGGCCTCGGA TGCAATCCTG  
GAGGCGGGAG ATTGCGCCIN AAGACTGGCT CGAGCCGCC AGGGGCTCCA TGGGAGACTA ACGCGGAAGT YCCAGCCGTC  
CCAGTGCCGT GACGTCCCCC CTGGTGGGG CCTGCACCCG ACTACT

SEQ ID NO:278: (Length of Sequence = 260 Nucleotides)

ACCTGTAATC CCNGCACTTT GGGAGGCTGA GGTGGGCAGA TCACGAGGTC AGGAGATAGA GACCATCCTG GCTAACACGG  
TGAAACCCCA TCTCTACTAG AAAAATACAA AAAATTAGCC GGGCATGGTG GCGGGCGCCT GTAGTCCAG CTACTCGGGA  
GGCTGAGGCA GGAGAATGGC GGAACCCCG GAGGCGGANT TGCACTGAGC TGAGATGCGC CCGTCTCTCC AGCCTGGGCA  
ATAGAGTGGG ACTCCATCTC

SEQ ID NO:279: (Length of Sequence = 308 Nucleotides)

GTGTCTGGGC TCAGGGTTGG CCAGCTTGCA GAGGAGCAAG CTAGTAGAAA TATTGCAGGG TTCCCAAAAC CAGGTCAAGC  
AAGATGCCAT GTCACCCCTG AGCATGCCCTG TCTTCCGAGG GGTGTACCTC TTGGCTGGCA AAGCCAAGGC CAGTGGGNAC  
TTGTATAAAT CACATGGGTA TGTTCTTGGT TCAGTGATCT TGGAGTGATG ATGGTAACTN ATGAACAGAG AACTTTYYAG  
AACTTKGGTC CTGTCTTCT CCTGAACCT AGACAAGTTT CACCCCTCTCT CCTGTACCCA ACCCCATT

SEQ ID NO:280: (Length of Sequence = 402 Nucleotides)

ATTTTAGCAG CTTCCTTGAA ATTTAAATA TATGTGTAAG TATCTCATT ATATGCATT CTAGTTTCTT TATACAACAG  
AATAACTTCT TTTACATCAA ATTTCTGAAT TTGACTAAAT TTGAAATAA TGAATCTCA TCCATTAAAT ATAGTCATAG  
AAGGAAGGAA ATATGAAAT TAGGATTCA GATGTTGAA CATAAAGAT AATTTTAAAC ATGTGCAGTA ATCTATTTCT  
TTTTTTTTTC GAGACGGAGT TTTGCTCTGT CACCCAGGCT GGAGTGCACT GGCGCGTCT TGGCTTACTG CACCCTCTGC  
CTCCAGTTT AAGTGGATT TCCTGCCTCG NCCTCTGAG TAGCTGGGGT TACAGGGGCA TGCCAACATG CCGGGGCTAA  
TT

SEQ ID NO:281: (Length of Sequence = 313 Nucleotides)

GAGAATCCGT CTAAAAAGA AAAAAAGAAA ATTATAGAGG GAGATGAGGT GGGACAGAGT CTGGCAGTTC ATCAGGGGGA  
CTGAGAAGGT GGCATTTGGA GGAGAGGAGG CAGTGAGCTG TGCAGTGTCC AGGCAGCCAC CCTTCCCAGC GGCCACCATG  
ACGGTGTCT CATGTCTTTA ACCATTAGTA ATCATTCAAT CATTCATTCA TTTATCCGAC GTCAGCTGGA GGNCTGTCCC  
GNGGGGCATG CGCTTAGATT TNGGAGGCTT TCCGGGATGC TTGCGCTCCA ACGGGGAAG GCCGACTTGG GCT

SEQ ID NO:282: (Length of Sequence = 217 Nucleotides)

TGACCTCAGT TGATCCACCC ACCTTGGCCT CCCAAAGTGC TAGTATTATG GGCGTGAACC ACCATGNCCA GCGAAAAGC  
TTTGAGGGG CTGACTTCAA ATCCATGTAG GGAAGTAAAA TGGANGGAAA TTGGGGTGCA TTTTCTAAGG ACCTTTCTAA  
CANATGGCTA TAATNTAAGG GGTTTAGGGT CCTTTTTTTT TTTTCAGGGA TACATT

SEQ ID NO:283: (Length of Sequence = 327 Nucleotides)

TAGAGAGCGC TTTACTCCTG GTCCCATGGC GTAAAGATGT GGCTGGGCCT GACAAGGCTC AGCCTCCAGT CTTAAGATGG  
GCACAGAAGG GCAAGAAGTA AGATGACGAG TCCAGAATT AGGACAAGCC ATGAGCCAAG GCCTGGTCTG AGCAAGGGCA

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GCCCCCTGTC CCAGACACAG GCACCCCAAA TCTCACTTTG GACAGAGCCA ACGTGGGGGG ATCTCCCGG GCGTGGGCGT  
GTCAAGTCTG CCTGCAGGAC CCGCCATTG TGCTCAAATC ACAACCATTT TTTGCTTCCA ACATTTTAGG GTGCTTGTC  
AGTGAGT

SEQ ID NO:284: (Length of Sequence = 340 Nucleotides)

CTTTGGAAAT GTAAATTGTT ACAAACTTAC TTTAGAGCAA ATTTAGTCAT CCTTCAAAAA TTAAATGTA TACTTATTTT  
CTAAGAATTC GTTTGGCTCA CACAATTGTG AAAAGATAGA TGTACACCAG TGTTCATTAC AACAAATTATG CAACAAATCT  
ATTATGTGCC AGACATTATT CGGAACCTG GGAATACATA AGTGAACAAA GCAGATTCTT GATCTCAGGA CTTGGGGTCA  
GGGGTCAGGA GAAGCCAAAA AACACGCTNG AGAAATACTT TATGCAGTGT GGGGGGAGTG CTACCAGCAG AGCAGGGGAT  
GGNGATGTGA AATCTTGTT

SEQ ID NO:285: (Length of Sequence = 335 Nucleotides)

GACATTCACG GAGGTGGGTT CGACCTCCG TTCCCCCACC ATGACAATGA GCTGGCACAG TCGGAGGCGT ACTTTGAAAA  
CGACTGCTGG GTTCAGGTACT TCTGCACAC AGGCCACCTG ACCATTGCAG GCTGCAAAAT GTCAAAGTCA CTAAAAAAT  
TCATCACCAT TAAAGATGCC TTGAAAAAGC ACTCAGCAG GCAGTTGCGG CTGGCCTTCC TCATGCATC GTGGAAGGAC  
ACCCTGGACT ACTCCAGCAA CACCATGGAG TCAGCGCTT AATATGAGAA GTTCTTGAAT GAGTTTTTCT TAAATGTGA  
AAGATATCT TCGG

SEQ ID NO:286: (Length of Sequence = 399 Nucleotides)

GCACAATTAT TAAAAAGAGG CCACTTAAAT TCAACTCTCC ATGGATACAG TGTCGTGGC AATGTTTAAAT TAGAGATTAA  
AATTGAGGAA TTGAATAATT GAGGTGCTA ATGAATTGTA AAACCTAGCA AAGCAAGGAG AGCTGAGCGT TTTCCGACT  
TAGCTTTTCT TTCTCTAACC CTTTCTCAT TTCTTACTAT TATCACAAT CTGGCCTTGA CTGCTGAGTT TATTACTACC  
CATAACCCTG GCCTAAGTGG AAACAAAAA GCTGTAGCCT CTTTGCTGAG CTCTGGAGA CATTTGGTCT ATTGGATTTA  
TGACATGTT AGAAGCTTGC AGTTGCAGGA GGCTGACAAT GATGAAAATG AGATATGNTG GGCCACCACG CTTTCTGT

SEQ ID NO:287: (Length of Sequence = 294 Nucleotides)

TTCCAGTTGA ATTCACCACT GGACAAAATG AGGAAAACAG GTGAACAAGC TTTTCTGTGA TTTACATACA AAGTCAGATC  
AGTTATGGGA CAATAGTATT GAATAGATTT CAGCTTATG CTGGAGTAAC TGGCATGTGA GCAAACTGTG TTGGCGTGGG  
GGTGAGGGG TGAGGTGGG GCTAAGCTTT TTTTAAGATT TTNCAGGTAC CCTCACTAA AGGCACCGAA GCTTAAAGTA  
GGACAACCAT GGAGCCTTCC TGTGGCAGGA GAGACAACAA AGCGCTATTA TCCT

SEQ ID NO:288: (Length of Sequence = 391 Nucleotides)

TCTACAGATG AGGAAAGCAA GCTCAAGCA AGGGGGGCGT GATCCTTTCC CTGTTCCCTG TGTATTCCTT GTCTGTGGCA  
AAGCCCATTG CTTGATTCT CTCTCTTTA CTTTCATGTT GAGAAGTAGT TTCTTTCTGC AGTTTATTTA ATTTACTGGC  
AAAATGACGT ATTTTMTT CAGCAATGTT TCAGCTAGAT ATTTGCTTTA TGCATGTAAT GTCAATGAAG TACTCATAAG  
TTTTCAAGAA ATGACTGATA TAAATCATGT GTTCCACTAC ATAGTCTAAA TATTTAGTAT TTGGTCATCT ATTTTAATAT  
GTTCAAATTC TGTTAAACAA GNCATAGTCA CTATGTGAAG ATAAAAATAG NCAAGTTGC ATTATGACTT T

SEQ ID NO:289: (Length of Sequence = 198 Nucleotides)

CTTATATTCT ACTTTATTG GTAAACTCA GAACTAACA ATTCACATCC TCCCACCTTC TTCTTTCCGA AGAAGGCAGT  
TTGCAGAGAC AAAAGGCTG TGGGTGGG ATCATCCACC ATCTCCAGT TTTACACCCA GGCTACCCAT GGCTTGGCAG  
TCAGGCCTCT AGGCTGATTG CTCTCAGAGG CAATAGAA

SEQ ID NO:290: (Length of Sequence = 353 Nucleotides)

GGTTTTCATC TTCGGTTTAC AAAAGTCCTA CTATTATTT ATTTTAACTT TAATTTAAAT ATCACCTACC TTAGGTAGAA  
GTTTTCCTTT GGTAAATATA ATATAAAACC GACATTTCTT GGGGGCATAA TAGTAAAGAT GTTAACATTT TTTGGTCTT  
TTTGGATGCT GTATTTGTGC TTCTTCTGAA AGTGATGTGT GCCAAGATGG CTCATGTAAC CCAGTTTGA CTAGGCTATT  
GATATTCTGT CTGGTTAATT TATTGAACIG GCTTAAAGCT ATACATATTT CCTTTAGNTGTAA GATATTCTAG  
ATATATTGGT CTACTGATTC ATAATATCAC TGG

SEQ ID NO:291: (Length of Sequence = 163 Nucleotides)

CCTGGTAGGC CTGCTACACA GTCTTGCAAC GNCCTCTGTC CTGGGCTTC TCGGTGAGG CAGGGGAGTC TGCTGTCTT  
AGATGTTGGT GGTGCAGTCC CAGGACCAAG CTTAAGGAGA GGAGAGCATC TGCTCTGAGA CGGATGGAAG GAGAGAGGTT  
GAG

SEQ ID NO:292: (Length of Sequence = 397 Nucleotides)

ACGGGAAGGT GAGTATGTA GTATGTNIGC CAGACAATGG TGTTCATG TCAATGGAGG TTTCTCAGAG AGAGGTGATC  
TGGCTGGAGA AAGCTTAATC TGGTGCAAT GGACAGGTGA CTTTAAGAAG TGGGGAACGA GGAAGGAGG CCAGTTTGAA  
AATNATAACA AGGGTCCAGA CTCAGTGATG CAGCAGTGAC CATGAGAACA GAGCAGCTGC AGGTAGAAGA TGGAGACAGA  
ACTNGGGAGA TCTGGTGGAG GTAAGCCGCG TGGAAAGATG ATGTCAGGTT TATACCTAGA GGACACATGA TCCATTCA  
AAGCCAGGGG NAACCTAAAG AGAAAACACT TAGAATTTTIN GGAGAANAGG CTAGGCTGG GCCTTAGACA TGGGCTG

SEQ ID NO:293: (Length of Sequence = 360 Nucleotides)

GAGGTAAAT TTACATACAG TGAAATCCAA ATCTTAAGTG TACCACTAGA TAAATTTTGA TAAATGCATT ATGCCTGGTC  
TTCACACACC CTTTTCAATA TATAGAAAT NTCCAGATAA TTTATTTTGT TGTTTTTTTC ACACACTAAG TTCTAGACTT  
TTCCAGGTCC GAGGGAACCTA TTAGGGGGGA AAGTACTTGT NATAGTAAAA AAGATTTTAG GTGTGTTTGT TTTTAAGGTG  
CAGAAACACA TCGCAGATT AAGGTCTGCA ATCTCTGCTT TTTGTTATTG TTCCAGTTTT GATCTCAGTG ACATTACAAG  
CAAGCAGAAA CACTCAGACA TGAAATGGCC CAG

SEQ ID NO:294: (Length of Sequence = 321 Nucleotides)

TTTTTTTCAG GNTTCAACCG TTTTATTGGG AGGTTTGTGTT TTCTGTGAAA TACACTAGAG GGTGGGGAAG GGGACACATT  
CACTTTGCAA GATAAGGGTT TCCCACCACT AAAGGAAAGG CATGGGGCAG GGCACACTGG GGTTTGGGTC CGTTTTCCCA  
CCTCCTCTG CTGGCTCAC TTTTCTTTTC TCTCAGCAAG TACCACAGAA CACAAAGACA AGAAACAAA CAGCAAATCA  
ACCTCCAACG GGGCCATGCC AAGCCTTCCC CACTCCCCCA GGCTGGGCAA GGGCTGGGAG GGGGCTGGG CAGCTCACTC  
G

SEQ ID NO:295: (Length of Sequence = 165 Nucleotides)

GACACACAGC GCCTCCGGCC CGGCACAGGG GGCATGTCCA GAGGTGCTGT GTGTACCAA CTGGTCTTCT AATTTGGAAG  
GAGTTGGAAA GGCCTTTTGT TTGATGAAAA GTTGGAAACA GTGGCACATA TCTNAGAGGG AGGAACGAGG CAGCGTGGTG  
AAGCG

SEQ ID NO:296: (Length of Sequence = 315 Nucleotides)

CGAATACAGG TAGTGCCAG CTGGTTGGGC TGGCCAGGA AATNCTGCT GTGTCAAATA CTGCTGGCCA GGATGAAGCC  
ACAGCTAAGG CTGTGTGGA GCCATTGAG AGCACCAGTC TAATTGGGAC TTAAACCAGG ACATCTGACA GTGAGGTTCC

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AGATGTGGAA TCTCGTGAAG ACTTAATTAA AAATCACTAC ATGGCAAGNA TAGTGGAACT TACGTCTCAG TTGCAGCTGG  
CTGACAGTAA GTCAGTGCAT TTTTATGCCG AGTCCGAGC ACTGTCTAAA AGACTNGCCT TGGCTGNAAA GTCTA

SEQ ID NO:297: (Length of Sequence = 244 Nucleotides)

AGTACGGTIN NCGCTNAAGC TTGAINATCG RATGCCAAT CINCATAITTT GTGTTAGAAT CAITTTGTTTT TGIGTCTTCA  
TGTTTCTATA AGATAGGACC AATATTCTTT ATTGGGCTTT GATTTTATTT TGTAACITAA ATGTATTAAG GCAATAAATG  
TAATTTTCCA CTNAAAACAT TCATTATAGA TTTGGTTACT ACCTACTGCT CAGCAATTTT TTTTCTTATC AAAATTCTTC  
CTGG

SEQ ID NO:298: (Length of Sequence = 152 Nucleotides)

CCTGAACAGG TAATGAGAAA AATTTACACA CAAGTGATTT TGAAAACAGA ATGGGTGCT TACAAATTAC AGGAAATGTT  
ATAACACAAA CCAGAAGAAT TCAATGGAAG GCAATAAGGGAAAT GAAAATTATA AAAGTATCAN GA

SEQ ID NO:299: (Length of Sequence = 374 Nucleotides)

CGATGTTTTT AATGTCATCA CACGTTGTCT CAAATGAGT GGTGGCATCA TATGTGCGGG AAATAAAGAT CTGGCTTTCT  
GTTCCCAAGT CTTTTGGTAC CAGGAGGTCA CIGATGCTAA CAAATTTCTG TTCAATTGGT TCCAAGAGCT CCAAAGCTGG  
TCTGATTTCC TTCTCAGGCT CCTTGGTTTC CACAGTTGTA CTAACATAG CAATGTACTT CCCTTGCTGCT GCTACATTGT  
GCGCAAAGGA GATCATGCAG ACGTAGATAT CTGACTTTG ATTGACTTTG GTTCTGTGGA ATAATGATCT GGCAGGAGTT  
GGCATCATTG GTGTTCTTTG ATGGGGGTGG CTGAGGGATG CAAATAACCT CTTG

SEQ ID NO:300: (Length of Sequence = 365 Nucleotides)

GGCTCACCAA GCTCAGCAAG TACGTGTACT TCTTCGAGGC CTGCCGGCTG CTGCAGAAGA TGATTGACAT CTCCCTGGAT  
GGCTTCCTGC TGACTCCGGT GCAGAAGATC TGCAAGTACC CTCTGCAGCT GGCCGAGCTG CTCAAATACA CGCACCCCCA  
GCACAGGGAC TTCAAGGATG TTGAAGCCGC CTTCGATGCC ATGAAGAAGC TGGCCAGCT CATCAACGAG CGGAAGGGTA  
GACTTGAGAA CATCGACAAG ATTGCTCAGT GGCAGAGCTC CATAGAGGAC TGGGAGGGAG AAGGATCTCT TGGTCAGGAG  
CTCAGAATC ATCTACTCGG GGGGAGCTGA CCTCGGGTTA CACAG

SEQ ID NO:301: (Length of Sequence = 224 Nucleotides)

GGTATTCAAA CAAATAGCCT GAGAATTING GGGGGATCTG AAATAGAGTA CTATGCTATG TTGGCTAAAA CTGGTGTCCA  
TCACTACAGT GGCAATANTA TTGAAGTGG CACAGCATGC GGAAAATACT ACAGAGTGTG CACACTGGCT ATCATTGATC  
CAGGTGACTC TGACATCATT AGAAGCATGC CAGANCAGAC TGGTGAAAAG TAAACCTTTT CACG

SEQ ID NO:302: (Length of Sequence = 363 Nucleotides)

AGTTTCACTC TTGTTGCCCA GGCTGGAGTG CAATGGCGTG ATCTCGGCTC ASTGCAATCK GCACCTTCCG GKTTCAAGCG  
ATTCTCCTGC CTCAGCCTCC CAAGTAGTTG GGATTACAGG CATGCGCCAC CATGCCCGGC CAATTTTAKTA TTTTTCGTAC  
ACACAGGGTT TCTCCATGTT GGTCAGGCTG GTCTCAAAT CCCAACCTCG GTGATCCGTC CACCTCGGCC TCTCAAAGTG  
CTGGGATTAT AGGCATGAGC CACTGTGTCC GGCCAGCTCA AACAAITTTA ATGCTTCTTT CAAGNCTATT AGAAACCTTT  
AATTGCTTCT TAAGTTTCTC CCCCAACTAT GGAGGAAGCA TAT

SEQ ID NO:303: (Length of Sequence = 253 Nucleotides)

ATGCAGGAAS ATCTACCARG CAAATCGAAA ACAAAAAAAG GCAGGGGTTG CAATCCATCT CTCTGATAAA ACAGACTTTA  
AACCAACAAR RRTCAAAAGA CACAGAGARG GCCATARCAT AATAGTAAAG CGGATCAATT CAACAAGAAG AGCTAACTAT

CCTAAATATA TATGCACCCA ATACAGGAGC AACTAGATTG ATAAAGCAAG TCCTGGAGGT GCCTACAGAG GAGGCTTAGG  
CTCCACACA TTA

SEQ ID NO:304: (Length of Sequence = 416 Nucleotides)

TTTTTTTGAG ATGGAGTACT CGTCTCTTG CCGGGGCTGG AGTGCAGTGG CGCGATCTCG GCTCACCTGC AACCCCTGCC  
TCCCCAGTTC AAGAGGTICT CCGCCTCAG CCTCCCGGT GGCTGGAATT GCAGGCACAC ACCACCATGC CCAGCTGCIT  
TCTTGATTTT TTAGTGGAGA CGTGGTTTCA CCATGTGGC CAGGCTGGTC TTGAGCTCCT GACCTTAAGT GATCOGCCAG  
CCTTGGCCTC CCAAGTGCT GGGATTACAG GCGTGGACAC CGTCCCGAG CTGTTTTTTA ACTGACTTTG GATTTTACTC  
CCITTCATG CAAATTTATT TTAGAATCTG TTCCTTAACC TTAGGGGGT GGGTTAGACA AGTTTCAAGG GAGCCTCAAG  
TGKAAATGCT TTAAGG

SEQ ID NO:305: (Length of Sequence = 223 Nucleotides)

CACACCCAGC TAATTTTTGT ATTTTITAGTA GAGACGGGGT TTCACCATGT TGGCTTGGCT GGTCAOGAAC TCCTGGCCTT  
GAGTGATCCC CTGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGTGTGA GTCAGCGTGC CCAGCCGAGA TTTTATTGTT  
TTAATTACAA ATTTTACGTT AACTGATTCT GCACATTIAT ATTTGCACAC TTGTGCTAGT GAG

SEQ ID NO:306: (Length of Sequence = 169 Nucleotides)

GTTTTGCCAC ATGGCCAGG CTGGTCTCGA ACTCCGACC VVGIGAGCCA CTGCCTTGG CCTCTCAAAG TGCTGGGATT  
ACAGGCGTGA GCACCAAGCC CGACCCATAG CTCITTACAA CTGCCTTGTA AAGAAAGCAT CATTGGGCAC TGTTAGTATT  
TCTCTTGAA

SEQ ID NO:307: (Length of Sequence = 303 Nucleotides)

GATTTGGTAC AGAGTATGTC AGGAAGACAA CTCAGATTGC CATTTTAAAT AAGTTGTAC ATGAACAATA ATTGGAATCA  
TCAGGTAAAT TTTTAAACA AAGGTCTTC ATTTACTGTT ATGATTGGAA AAAAAATTAG AAAATAAAGT AAGTSCCAT  
GGCTAATTAA AAAATAAAC CTGGCCGGG CGCGTGGCT TACGCCATATA ATCCAGCAC TTGGGGAGGC CGAGACGGGC  
AGATCAGNG GTCAGGAGAT TGAGACCATC CTGGCTAACA CGGTGAAACC CCATCTGTAC TTG

SEQ ID NO:308: (Length of Sequence = 143 Nucleotides)

ATCTAGGAGG CTGAGGTGGG ATCGCCCCAG TACTGGAGGT CAGGGCTGCA GTCAGCCATG ATCATGCCAC TACACTCCAK  
CCTGGGTGAC AGAGTGAGAC CCTCTSTCAA AAAACCTCAG TCAATVCAA CACACAGTAT ATT

SEQ ID NO:309: (Length of Sequence = 199 Nucleotides)

CCCACCTCA TAANCCCCAC TGGGGAGTCT GGGGGCTCT ATTGCCATGT GCCTGGGAATN ATNATATGCT CATCACTTTA  
TGAAGAATAA AATTTGINTT TCCTGCCCTA AAGTTACATT CGTCTTCCG CTCAAATCCT GATCTGGTCC ATTAAGAGT  
GTTGCGAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCC

SEQ ID NO:310: (Length of Sequence = 426 Nucleotides)

TCCTGTACC ACCTCTCCT GAATACGGAG GAAAAGTTCG TTATGGACTG ATCCCTGAGG AATCTTCCA GTTCTTTAT  
CCTAAACTG GTGTAACAGG ACCCTATGTA CTGGAACTG GGCTTATCTT GTACGCTTTA TCCAAAGAAA TATATGTGAT  
TAGCGCAGAG ACCTTCACTG CCCTATCAGT ACTAGGTGTA ATGGTCTATG GAATTAAAAA ATATGGTCCC TTGTGTGAG  
ACTTTGCTGA TAACTCAAT GAGCAAAAAC TTGCCAACT AGAAGAGGCG AAGAAGTCT TCCATCCAAC ACATCCAGAA

160.

TGCAATTGGA TACGGAGAAG GTCACAACAG GCACTGGTTT CCAGGAAGCG CCATTACCG TTTTMTATGG GMCAAAGGGA  
GTTACATTGG CTATGGCTTT TGGAAG

SEQ ID NO:311: (Length of Sequence = 489 Nucleotides)

TGCACTCGGT CCTGGATGTG GTGAGGAAGG AGTCAGAGAG CTGTGACTGT TTCCAGGGCT TCCAGCTGAC CCACTCTCTG  
GGGGGCGGCA CGGGGTCCGG GATGGGCACC CTGCTCATCA GCAAGATCCG GGAAGAGTAC CCAGACCGCA TCATGAACAC  
CTTCAGCGTC ATGCCCTCAC CCAAGGTGTC AGACACGGTR GTGGAGCCCT ACAACGCCAC CTTMTGGTTC CACCAGCTGG  
TGGAAAACAC AGATGAAACC TACTGCATTG ACAACGAGGC CCTGTATGAC ATCTGCTTCC GCACCTGAA GCTGACCACC  
CCCACCTACG GGGACCTCAA CCACCTGGTG TCGGCCACCA TGAGCGGGGT AACACCTGCT TGCGCTTYCC GGGCCAGCTG  
AACGAGACCT GGCAAAGTGG CGGTTGACAT GGTGCCCTTC CTGGCTGAAT TTTAATGCC CGGTTTGGGC CCTACCAGCC  
GGGGAAGCA

SEQ ID NO:313: (Length of Sequence = 302 Nucleotides)

CTTCTCATGC CAGTCTAATG ATTGTTTTTA GAAAAGGATA TACATTGACC TTCAATGTAA TAAGAAATGC AACACTTTAC  
GGTGTCCAAC TGCTAAGATT TATTTCCAAC TTGTGAGACA CAACTATTTT GCCCAATCCA AATCAAAGGG AATCAAGGCT  
GTGAAATCCA CACAGGACAT CAACGCACAC ATAAATGAAA ACTACAGATG TGTCAGAGGC AACCATATAC ACACAAATAA  
TGTAACACT AAATTCCATG AAGTAGCTGT CCAGGGAATA CTTTCCAAAT AACCTTCAGC AG

SEQ ID NO:315: (Length of Sequence = 339 Nucleotides)

CGCGTTATTT AAATTGTGAA AAATAATGAA TATTAATTTG GAGCATAATA TTAAATACA TGAAAAAGC TGGCTGGGAA  
ATGTTGGCAT GACTTTTCCC AGATGTTAGC ACTGCTTCAA CTMTTGAGAG NGCACTCTGA GTGTAAGTTT ACTAGACTGA  
CATTACTAAA ATCATGGTG CTATAGAGGC AGGAGAATAC GGGGAATAAG AAAGCCAGTT GCAAGCCAAC AATCCTAAAA  
CTCCTCCTTT TGCCATGGAC TGACGGCATA TTAAATGAGA TCATGCATTT TAAGGNATTA AAGTGTACA CCACATGTG  
GTGTTCCAAT AAAAGGAAG

SEQ ID NO:316: (Length of Sequence = 430 Nucleotides)

TAAGTGGTG GTGCTGTCT GGATGCTTCC AGTGGGCCCC GACCAGGTCT GGACAATGCC TGGCGCCCGT CCCCCGCC  
TCCTCTACAC ACACGCAAGA NTTCGGAGCT CCATGGGGAA CAGAAGCAAG ATATCCGTAA AATCAAAGTC TAGGGGGTGG  
GAATGAAAAG GGAAAAGTGA GGAACGGGGA GCCAAACCCA GGAAGAGCC TCTTTTCTG CACATTCCCT CTCCTTTATA  
TACTCAGCTC TGGCTGTCT CCAGTATGTA CCCACCTGG TCTTCCAAGC TGGGAGCCAC TTTTATAAC ACAATCACAG  
TTTCACAAAC CCCAGGAAG TTCCATGTGG NGAGAGGTTA AGTTTCGNCC TTGTCCGGGG AATTATGACA CTCAGAATAT  
CCCCTTTGGT GTAAATGGAA GACAACCTTT

SEQ ID NO:317: (Length of Sequence = 317 Nucleotides)

GTTAATGCTT CTNATACCTA ACAAATCCTG GAGGGCAGNC AGCACCAACA CTCAGGGTGC TGGGAAAAGG TGGTGAGAG  
ATCTGAGGCA TCTCGGGGGC AGGGGAGGGC TGGGAAGGCA GGCTGGCTNG GACCTCGCA TCTTAACCTA ACCTTGACCC  
TCTTTCCATG AGCAGAGTTC CGATGCCCTG GAAGCTGGG AGAGTGGGGA GAGATCCCGG AAAAGGAGAG CAGTGTCTAC  
CCAAAACAG AAGAGTGAGG CTTCAGGGT GCAGCAGGG TGGGAGGTGA TCAAGCAGCG TGGGGATTGT AAGCCCC

SEQ ID NO:318: (Length of Sequence = 407 Nucleotides)

CTGCCCCGC ACCTTCCCCG CCTATGCCCC TGGCTGAGAT AGGCCCTTCC CTCCTCCGGG AGCCTCCCGG GCCACGGAC  
CCTCAACTTC TCCAGCCGCT CCACCCACGC TTCTGGACC GCCTCTGCA GCGAGGCTC ACATCCAGCA CTGTCCCTTA

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CAGTGGCCAT GCCCTTGGCG ACCTCAGTGT CCCACTCTGT AAGGGGACAA TGCAAATCCC TTTCCTCAT AGGGTGCATG  
 TGCCAGINTT GATAAAGTGC TGGCCACAGG CCCTGCCTTC CCAGGGCTCA CAACACTGTG TCCCTGACAC ACCCGTGGGC  
 TGTAGTGAAT CTNITTCATGG GGATTGACT ATAACNGCA GTCAGGAATG AATTTACAN CATAGCTCAG TACATACACA  
 CATATCT

SEQ ID NO:319: (Length of Sequence = 382 Nucleotides)

CACTGCACAC CTGCGGTTGG GGACAGGACA TGAATAAGCA CAGAGCTTTC TTCTTTTIGAG GCCACGCATG TGGTGCAGAG  
 OGGGACCACC TGCATCCACA CAGCCCGGCG CACCTGCTCC TACTTCTGCT TAGCGTGTGA GCAGCTTGGT GACCAGGGTC  
 TCCACCAGGG GGCAGGCCAG GACCGGCTTA CAGCACTTTC TAGGGGTTCT CTGGTCCCGG GCTGGGACAC ATACAGGGCT  
 TAGTAAAGTT CATAGATGGT AGCTAGGCAG CCCCAGGCC CAGGTGACAC CTNTCCCTG CTTGNCCTGT ACTGNCCTGCC  
 TGCAGCACTC CTGGGAATCT TGTACGAAGA CAAGGAGAGA CAGGACTTCA TCTTCACCAT CT

SEQ ID NO:320: (Length of Sequence = 368 Nucleotides)

CATCCGGGGC ATGGACAGCC CCGGGGTGN CCGCCGNC CCCCCTGCC GCGTCGGTG CNGTTCACCA GGCAGCACCT  
 GGACAGCTCC AGAGTCGGGG AAGCGCCATG GTTCTGCGC AGAAAGGATG CCGGTGTTGGG CCGGCAGATC CTGCCAGGAC  
 TAGGGGCCCTT CCCTTTCCAT CAGGAGCCTG CAAGAGAAAC AAGAAAACAT TAGAGGGGCT TCTGTGTAGG GGGAGGGCAA  
 GTTGAAGTCTA TCTTCTCTT TGTAGTACT AATTAAACAC CTGCTGNTG CTTGTTACTN TGCAGGGTGG GACAGGCATC  
 ATAGCAACTC ACAGTGTCC CTTCTCTTT GTGCCCATAG TCTAGTAG

SEQ ID NO:321: (Length of Sequence = 355 Nucleotides)

GGTGGACTGT GCTGTGAAC TGAGCTGAAC TGGGATCAGG AGAAGGAGAA GTGGGGATG AGCCCTCAC CTCCACACAC  
 TCTCTCTGT GCCTGAAATT CTTCCATTAA GCAGCATCGC TGTCCCTGT AAACACCCAC ATTAAGCCAT TATTCATCTT  
 ATGGCTTINAG TAGGCGTAG TCCCTCAGAT CTTTCTCTG TGAAAGCGGA TCTGATAGA GAGAAGGGAA GAGAGATGGA  
 TGGTCTGGG GACGGCAGGC TGGTCCAAGA GTGGGGAGGA AAGATGTCTC TGGACTCTN GGGNAAGAAA TATTTTCTGG  
 GGAATATGG AGGCACCANA GGCAAGCTCA AGAGG

SEQ ID NO:322: (Length of Sequence = 225 Nucleotides)

CTCTCACTTC TCACCAGGCA CCCACAAAGC CCCCAGGCAG CTCCATCTTT CCAATCCANT CCCATTATCC CAATCTCTAC  
 CCCAGGATCC CCCAACTCC TCCACTTCA CTTCTGCCAC AGACCGCTC GCCCCAAAC TTCAGCTTNC CTTATCTGTC  
 CCTNACCACC CACAGCCCT CTTACCTAGC CTTCTCCGC GACGGGCCCG CGGGCTCCCC ACATT

SEQ ID NO:323: (Length of Sequence = 250 Nucleotides)

CTCTCGCTCC TGTCGGTAC CTTCAGATG CAGGTGACAG CTTGCCCTTC CGTTTTTNTC TTTCAGTCC CGCTGCGCG  
 ATTGGGTTC AGCCCTGCCC ACACGCCCG TACATCCGC CTACACTCAC CGATGTGCC TAGCAACCCG GCTCGCGGCC  
 AGCATCCGCA ACCGAGGTCC CCGCGCTCCA GTTCTCTGN GGGGAGGGAG AGGGGTGTG CTTCTCCAGC CCCCTGCAGC  
 CTGGTGTCTT

SEQ ID NO:324: (Length of Sequence = 338 Nucleotides)

GINTTCTTAT GCGGATAAAA TTTCINAGGT AAGAAAAGTT AGCTCTGAGC AGCCCTCCGC CTGATACTAA TACTTTACCA  
 ATGGAGATTT TCTTTTCTT TCTGTTTTT GAGACAGGGT CTCACTTTGT TTCCAGGCT GGAGTGCAGT GGTGCCATCA  
 TGGATCACTG CAGCCTCCAT TTCCCTGGCT CAAGCCATCC TCCCACCTCA GCTCCCGAG TAGCTGGGAC TACAAGGTGT

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GCACCACCAC GACTGGCTAA TTTTAAATTT TTNNNTAGAG ACGGGGGTTT CCCTATGTTG CCCAGGCTGG CTGAATTCC  
TGGGCTTCAA GTGATCCT

SEQ ID NO:325: (Length of Sequence = 461 Nucleotides)

ACTCCAGACT CCTCCAGCTG TCATGGATCC TGGGCCAGGG GATCCCGNAC TCACCCAAAG TGGGGCTTTG GGCGGTGGTG  
GGCCGGTTCA GTGGTGGAGC GTCTTTTGT CCAGCTCAGA ACCTGCTGCC GGTCCGGTCC CAGAAAAGTT TCTAGCGGGT  
GTAGTTGCCA AAATTAGGGT CTGINACTGC TGGGCTGGCG GTGGGCGCCT CATCCAGCC TTGGAAATCC TTGCTAGTA  
GCGGGAAGTT CTAAACAGCA AAGGATACAA GGCCCTTGA GCGCAAGTAA ATTTCCCTC TTGCAGCAAC AGGTGTCTC  
CAAACCAAGC AGCGTCCAG TGTGTCGGT GGCTGGAGTT CTGCAGTNGG GTGTGGGGAT TGGGAAGGTG CACAGGCAGC  
CGCTTGAGAC CCAGAGGCAG TTNGGGGGAG AGGCCTTGGG CTCAGAGGCC TTTCTTTGTT T

SEQ ID NO:326: (Length of Sequence = 391 Nucleotides)

GGCCCTCCAG TGTCTGCAG AGAGGCACTC TTGCCAAGTG TCATTGATGA CGCAGCTGAA AACCAGAAAC ATTTCACTTT  
CCAGCCACGA GACTGCAGCA ATCTGCTCTT TGGACTGCAC TTAGGGAAAC CGAGGCCAG ATAAGTACCT CCTCAAAAGC  
CCCCAGGACG GCAAAATCAA AGGGGCTGAG GTGCTCTGAA CAGCCCCAGC AAATTAAACC ACCTAATCTT GCGCTACTCC  
CACTGCCCTG AAGCAGCTG TGGTGGGAGG TGGGGGTGGA TACAGTGTGA CAAAGAGAAA CCTGAGTTGT AGCCATAGAT  
TGCTAATCAG TAACAAAATA TCCCTCTAAA CCCAGTCTG CTTGAACCC ACAGGCTCAG GATGGTAAAT A

SEQ ID NO:327: (Length of Sequence = 438 Nucleotides)

TACTGACTGA CCTGG GATTCCAGC CGAGACGTTT CTGCTCCATT CCGGCAGGAG CTACCTTCCC GAGCCGGCT  
TTGCTCACCT GTAGGAG TAGAGGGAAA TAAGACAGCC CTCTTAGGA TGGTGGAGTG GCTAGAAAGA AGCAATCCAC  
GCCAAAGGCT TAGCTCAGT OCTAGACTTA GTAAATGCTC AATAAATGTC TGCCATTGTT ATTATTATTT ATNATGCTC  
CAGCTGGCCT GGAAGGAGGG TTCTGGAGCC AGAAGGGACC TTGGAGAGAC CTCGGTTAAA TCTCTAGGC CATCTTTATT  
TTTAGGATGG AGTAACTTGC TCAGGACCTA CATCTAACAT TGTGGAGGGG ATCGGTTTTT TAAGTAGGAA TTCTINGACT  
AGACCTCTCA GCAACCTTTT CINTCCGTG ACAGTGGG

SEQ ID NO:328: (Length of Sequence = 400 Nucleotides)

TTGCCCTCTC GGCTAGAAAG TCTCCATTA TGGTGTGTG TCTGTGGGA CCCACGGGGC GCTGCACAGG GAACCATGTG  
GCCGTGAACC TCAAGTCNG NCCAGCAGGG GTCAATTGTC TCAGNCCACC CCTCCCTACC CCCAGTATCC TCTCTCCTTT  
ATAGATCATC CATTAAGTGC CAGACACTGC AGAAGGCACA TTGACTAATA TTAAATATTA GCCAGCTAC CCTGCTGGGC  
TGCTCTCTT AGAAATGAGG AAGTGGAGGG TTAAGTGGAT TTCTCAAGGT CGTGCAGCTG GTAAATGGCA GAACCGGAT  
TTGAATCAG GTGTGCATGA CTCAAAGGA AGACACCACT GAGGCCTCT CTANTGGGTC TGCNTCCCTA CCGGCCCTGG

SEQ ID NO:329: (Length of Sequence = 227 Nucleotides)

GGCTGGGCTA AACTCCAGAC GCTGGCCACC TTCATAGGGT GGAGATGACA GAACAGGACA GGAGCCATGG GGCTCCCGG  
GCGGGTAGGG GTGGGTCATG TTCCTTGGCT TGGGGGCAGT TACAAGGGTA CAGTGGGGCT TGTGAAGGG CAAAAGTTCT  
GTAAGTNGT CCCNACAGC CAAAGAAACC CCAGAGCCGT CTTTGCAGT ACTACAGCCT GGAAGAG

SEQ ID NO:330: (Length of Sequence = 401 Nucleotides)

TGAAATATA TCCACTGTT AGAGGGACAA CAAAGGCAGT TAGACTGTCC TGAACGGTCC TGCTCAGGC TGAAATTTTT  
GTAGCACTTG ATCAGTTGCA AAGTGATCTT CCTTTAATA TCTCATTTTA TCATTGGGTA TCTGAAGAGG AAGTGAATT  
GGGGTAAGAA TTTAGGTTCT TGCCATAGCA TTTGGGTGGC CAGGGTAAGC CTCAGGGTGG AGGACCCTTA AAGAAAAC



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TAAGGATTTT AAGGAGAGTC AAACCTCTACA TTCATCCAGG CAAACATCTA CTCCTCCATT GATTAATGEN TCCACTCATC  
CGTGCAACAC ATTCACCTCTT TCATCCATCC ATTCATCCAT CTATCCINCA TCAATCCATC CATGTATCTT TCATTCATCC  
A

SEQ ID NO:331: (Length of Sequence = 322 Nucleotides)

CCCAACGTIG CCCCGCCTTT GTCTCCAGCG GACTGGAAAG AACCCACCAT TGTGAAGCAC AGAAAATTGC CCGCACTCTT  
ATTGGCTAGG TTCCCGACT TCCGCTCTCG GTTGGTGGTT GGCTTTGCCT GTTACCTGTG TTGCCCACTA CCACTCGCTC  
CGCGAGCCC CAAGGATGGA TCGCTATCCC GTAGCCGGGT GTTCCGGAGC GCTCGGGCA AAGCAGACCG CCTTGCGCCT  
ATTATGGGTT GAGTGGCTCT GACTCTAGA TCGGCTCTGT CACTACTAA TGGGCGTGT TGCCTTCGCG ACTGCAGGTT  
TT

SEQ ID NO:332: (Length of Sequence = 441 Nucleotides)

GGCTCAAGNA ACCTGCACTC TTGCACTCTG GCCTTCTCCC AGGCTGAGCT TTATCATATC ATCAGCAGCA ACCTGGAGAA  
AATTGTCAAC CCAAAGGGTG AAGAAAAGCC ATCTATGTAC TGAACCCGGG ACTAGAAGGA AAATAAATGA TCTATATGTT  
GTGTGGATTC CCTTCTGGCG TGTGTCTATC ATTCAAAAAG CATTATTGA GTGGCACCTA TGTCCAGCCT GAAGATGAAT  
GTGGTGGGAA GGGTGGGTG TCACAAAGAC AAAGATGACT TAGATGCCCA CTGTAATCTT GACTGTGAGA AAGAGGGGAT  
TCAGGCCCTT TCTCATCCAG TAGTCAATGT GCCATCTCCC CTCCCTAGT CACCTCTTAT CTTCACTTAC CTTCTTTCTT  
CTCCTGCTTA TCTGTTTTCC ATCTAAGGCA AAAAGGGGGG G

SEQ ID NO:333: (Length of Sequence = 354 Nucleotides)

AGAAGCGTAG ACGAGTAGC TTGAGCGCT CTTCGGTTA CTTTTTCCCA GCGCCAGAGG GCCTTAGGGT TGGGGTCTC  
GCTCAGGCAC AGAGNCCGA CACGAGCGG CGGCTTCCCC GGGATCGAGG GACGCGCAGC CCAGAGGAGA CGAAAGGAAC  
CCGGGTGGA CCAGATCGGA ACCACTGACC ATTGCCCATG GCGGCCCTAG TGAGINTGA TTTNGCGGGG TTGCGGGGTT  
CCGACGGCGA CCTCGGCGAC CCTCACTCA CGCTTCCTC TTNCNCAGG GNCCTAGNAG CCAGAATGTC ACTGAATACG  
TNGTTCGAGT TCCTAAGTAA GTCCCCAGGC CCAT

SEQ ID NO:334: (Length of Sequence = 196 Nucleotides)

CTCCCGCTCC GCACCGCCT TTCCGAGCA GGCTACACCT CTCCCTGGCG CATCTTTACT GGAAAGCCGG CAGNGGNGNG  
GGAGAAGTGA GNCCTCTC CGCGCTCCT CGGTCTGCT GCTGAGCGC GGGGATGGCT CCGGAGGGAG AACTCAGGA  
AACCACCTCC GCGCTTCCCC CATCTTATC CAGCG

SEQ ID NO:335: (Length of Sequence = 261 Nucleotides)

TCCGAGAGCT GTCTGGGGCC AACGTGCTGG CTGAGTACTA CTGGCTCANA CGCCGCTGC TGGGGGCCCC TGGNAATNTA  
AGTCTGCCC CGGGCTGTG CCGCTCTC CTGANAGCC CCTGCTNCC TGGGCACAGG GAAGCCTCA TAGGCTAGTA  
GCATCACAGT GCCAGGCCA GAGCTTACTG GACTTCCCAA GTTCTATGG GACTAGGGCT GAGGGTACAC ATCTGCTTT  
TTCCAGAAT ATAAGTTTTG G

SEQ ID NO:336: (Length of Sequence = 191 Nucleotides)

CGGAAAAGCG CTTCGGCCAC ATCCAGCAGC AGTAGCAGC GCAAGGNC GGAAGTGAAG GCCACCGNA GNCGGACTAA  
GTGTTCAAG GAGCCGCTT CGGCCTACAA GGAACCGNC AAGGCTACC GGGAGGACAA GACCGAGCCT AAGGCTACA  
GGCGGGGCG GTCCNTCAGC CCACTGGGAG G

SEQ ID NO:337: (Length of Sequence = 279 Nucleotides)

CCTTAGGGCT CCTCCTGACT CCTTCCAACCT CCCAAGTCTG CAGCCCAGGT AAAGCCAGAG CAGACTNAAG GCAAGTTTTC  
AGGAAACCAG GNGGCTTGAT CCAGACTCAC AATCTCCCTG CAAAAGTKTT CAGAACACAC CGCACAAACA CACACACGNC  
TCACAAAACCT TCTGAATGTC GCTCTGTCCT CACCTTCTCC AGTCACCGAA AGACCTCGGC CTGAATTGGA GCCCGCAGCC  
GTAGCTGTCC CINTCCACCT GINGCCCTCG CGGAGGCTT

SEQ ID NO:338: (Length of Sequence = 339 Nucleotides)

CCACNCGTGG AGGGAGGCAA AGGGGCAGCA AGAGAGAGGG AGGAAGCCCC ACTCTTTTAA AACAAACCAGA TCTCTGTTRA  
ACTGAGAAGT CCCTTATCAC CAAGGGGACG GTGCTAGACC ATTCTAGAGG GWTCCGCCTC CATGGGCCAA TCCCCCTCCA  
CCAGGCCAC CTCCAACACT GGAAATAACC TCCAGCAGG CCGCCTCCA GCACTGGAAA TAATGCTTCA GCGTGAGACT  
GGAAGGGGAC TGATGGAGCC TGGWTGTTK TCCCCGCCCA GSTCTMACG TGAACGTAA TCCCCAATGC TGGAGGCGGG  
GCCTGGTGGG AGGTGACTG

SEQ ID NO:339: (Length of Sequence = 334 Nucleotides)

GGCACCAGGC TGCTCTNGT CCAGCTAGCC TCACAGGAG TGGCTCTAA AACNGGCCGG CCCACNCCAT TTGGAAGCTG  
TCCCGGGTTT TCCGTGAAGT CTTCCCGGCC TGTTGCTCC TGGATGGTCT GGACCAACAG CTTGGGGATG AGGGGAGGCT  
CGGGGCAAG GGCAGGAGCC CCAGCCAGGC GCTGGGGTIN TGGCTGATCG AAGAGCTGCA CCACCCNGTA GCTGGCCAGG  
TGAGTATNGG CGTCCACCAG GTGCAGACAC ACATTCTTTT CTTTACAGC CTCCTTACCC TGGAGTTTAT AGCCAAACGT  
GAGGTGATC CAAT

SEQ ID NO:340: (Length of Sequence = 450 Nucleotides)

GGCCCCACAA TCCCCTTCTG GCTCCGGGGA CGGGGGGGC GGGGCGAGCG GCGGAAATA ATTTINTGTT TGGTCGTCTC  
TGCCCCAGTC CCTTCGCCGC GGGACGGCGA GACGGGAGAA GGTGCGGAA GCGGAAGCA GGAGCGGGAG CGCGCGGCC  
TGGCACGCAT AGGGCGGCGG AGAGGGCAGC AGCAGGGATT GAGCACCTAC TGINTGCCCT CACGCTTTAC AAAAGGATTT  
TCGTTGATG TTTACTACAG CCCTGCCCCG GGGGTACTGA TGCCCCATTT ACAGAGGGAC AAGCCGGATT TCGGAGAGGT  
GAAGTCACTC GCGGAAAGTC GCACCGCCAG GGTCTGCGTG ACACCCATAA GCAGTGTTC GTTACCCCGG GGAGAGCGCG  
ATGAACCTGA ACCACTTGTT GGCTTGGTTC CTGCTCTTGC TCGTTTTTTT

SEQ ID NO:341: (Length of Sequence = 192 Nucleotides)

TTCAACCCT GCGGACCGG CTGTCCCTC GAGGCCGGC CCCTTCCCT TCCGGAGAGC CCACCGCTGG GTCCTAAAGC  
CCACCGCTGG GTCCTAAAGC CCGCCGGGTT TTTACCCAGG ACGGGGCTGG GGAAACCGG TCTTTCCTAG CTCTGGNTT  
ACTTCCTGGA GACTTCTTAA AACGAGAGGA GA

SEQ ID NO:342: (Length of Sequence = 229 Nucleotides)

GTGGTAACTT TTTTAAAAA CATAAATACC ATACAATTCA TCCTTTTAAA GTGTGTAATT CAGTGGTTT TGGTATATTC  
AGTGTGTCAC AGTCATCAC ACTAATCCA GAATATTTT ATCACNCCA CGGCTGTATC TCCATTTCT CTCTCCCKG  
CAGATCCTGG CAACCGCTGA TCTACTTCT GTCTCTTACA GACTTATCTG TTCTGGACAT TTCACATAA

SEQ ID NO:343: (Length of Sequence = 229 Nucleotides)

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TGCTCCAGGA AATTGGAGTT CNAGCTGAAG GCCTTGCGNC ACTCCGNGCA CTCGTAGGGC TTCINGCCCG INTGCGTGG  
 TCGGTGCTGC ACCAGCGTGG TGCTTCGNCC GAAGACTTGC CGCAGTCCGG GCAGCGGAAG GGCTTCAGGC CGCTGTGTGT  
 CTCCTGGTGG TGGATGAGCT GCGAGTNCGC GCGGAAGGCC TTNCCGCACT NCCTGCAAGC GTAGGGCTT

SEQ ID NO:344: (Length of Sequence = 227 Nucleotides)

TCGCGAGATC ANATTCACCC TTGCCAGAGG TCAGGSCCCC CGGCCTTGGC GGCGGGCCAG AAGCGTGA CTG GGCCTSC TG  
 GAATGCATGC CCTTAAACAT CTCTAGACTA GGGGCAGTKT CCGCCAACCA TGGAGGCCCT CCATCACCAT CCTGCGAGCA  
 TCACCACNT CCAACCCCA TGTCACCC TGGNGNTTCC ATACCTGTAG TAAGAGAGCA AACCATT

SEQ ID NO:345: (Length of Sequence = 249 Nucleotides)

GGGCAATGTT GTCACAGATG TGTGCAGATT TTSCAGAGGA CATAAGTTGG CTGTGAGGWA GAACACAGAG GTTSCCTATT  
 TTTTAGGCAG GAAAGAAAGC CTGCACTTTT CTGTGTGTGT GTNTCAATAA ATCTGAATAA CACCTTGAAA GGGTTAAAAA  
 GCTGAGCACC AGGTGTTTTT TTTCCACTTT CCAGAGTAAT TTAAGCACAC NSCAAAGTTA TCTCCCTTCC TTCCCCACGA  
 GCCAGCTTA

SEQ ID NO:346: (Length of Sequence = 356 Nucleotides)

ACCTAGTCCC GCAGCCGCTG CAGCCGCTGG GTTGGCGGAA GAGCTGGACG CCGAGCTAGA GGACGAGGCA GAGCTGGACA  
 CAGTGGCGGC GTGAATTGGC CACINCTTTC GGAGCCCGAN CTCTCCGCA CTGGAGAGGA CTTCTTCTTG GCTGGGCGGC  
 TCTTGGTTCC GCTCCCGCTC TGCTGCTGCT GGCGGCATTT NGCGCGCGG TTCTTGAACC AGACCTGCAG TGGGCGGAT  
 GGGGAGAGT GGGTCAAAGG GAGCTAGGGG AGCTTNTTGC TCCACCGNC CGTGGACCCA ACTCCCGTTC CAGAATATCG  
 CAATCCCTTC TCACCGAGGC CTTCGACCCT TCCTGT

SEQ ID NO:347: (Length of Sequence = 155 Nucleotides)

GCCGCGGTGC GTCGGATGCC CAGCTCGCGT CCAGACCCGC GGGATGCAGA CCGGTTTCAG TCAGGCTTGA GGGCTGCTCC  
 GCATAGACCA ACGTCCGGGG AAGGCACACA GTGGCCGAGG GCCCGCGCGC TTKGGCTACG GCTGTRATGG TATCT

SEQ ID NO:348: (Length of Sequence = 362 Nucleotides)

AATTCOGATT TAACGATTG TCTATTCTG CTCATACATT TCAAGTTTAA ATGCAAGCAT AAAATGTTTA TCAACAAATC  
 TAGAGAGCAC TTGGATTTIN AATTTTCTTG TGATCACAGT AAGGAGCATA AAAAAGAGTA TCTNCTGTTA CACAAGGCCT  
 GTNCTCTCTT TACATCTTCA GACTTAAATT CTGTAGAAGG TAACAGCTTT GTATTAAAGGA CAGAAGCTTA GTGGTCACAA  
 ACAAAAAATA AACTTGAAAT ACAATTGGG NATTANTGAT ACTGTGTGTC TCAAAGGATA CCTGAACCTAT TACANTNACT  
 AATAATTTGG GCAATGAGAT TCCNGGTGN TTCAACTTTT TG

SEQ ID NO:349: (Length of Sequence = 342 Nucleotides)

AATTCCTTTT TTTTTTTTTT TTTTTTTTTT TTTTCAAGTAT CACAATGTTT ATTGATAGAT ACAAGTATAT  
 AAAATCAGGG CATGANCATG ACTTGATAAA TTAAGTAGAC TTAATTTCAA TACTATAATA GGNGGGACCA ATTCAAATTC  
 TCACCATTTG TTTCACACCC ACAAAAACCA CTTCAAGGGC ATTAACGNTC TCTCAAAACT GNTCAGTTTT GTGCAAGTAA  
 ACCATGTTTC TTTTAAAAAG ACTGTGTGAC TTGCCAGGC TCAAGGTTAT TAAATCTAG GCACATAAAG NCCATTACTA  
 GAGGTAGGAA ATACAGGCAA TT

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SEQ ID NO:350: (Length of Sequence = 384 Nucleotides)

GATCTGTGCT AGCTGTGAGG CAGCTCTGGA ACGTGAAGAG CTGTTTGGTT TGANCCGTGA ACAAACTGT GTTTGTAGTT  
TAGCTGACAT TAAAGAAAAA AGTTCATCAC GTGACTGTTA ATGTAAACCT GGTTATTAAA ATAACATTTT AAAACAGGAG  
AAATCTGGTA AGTTGTTAGG NITCTAAAT CCCTTTAGTC TGTTCACTGA GATATTAAAT TTCAGTAGAC AGAACCCAAA  
AAGAGATTTT ATTTCTTTCT AATCACTTTG GCCTCTNTCT NTTTTNTTAA GTAGGTAAAA ACCTTCCTTG GTGGGCACCT  
AAGCAGGATG CAGCCAATTA GTTCATGAAC CCAGCTGCGG ACGTGAAGGC TTAAATCTA AGGA

SEQ ID NO:351: (Length of Sequence = 305 Nucleotides)

ATCCTGACCC TCCCCACTGC AAGCCAGGG AGCCCCAGCC CAAGATGGCC AGCCTGAAAC TGTTGGCCAG GGCTCCTCTT  
GTGGCCATGT ACCCAGGGCT GGCTGGCCTG CCATTTGCCT CTCCCCGAG ACAGCCGTTT TTCTGCAACC ACACCCCGT  
CCTAGCCACA ACCCAGGCT GCAGCTGCTC AGAAGCTCCA GGCATTTTGT TTCTGGTGAC CGCCCTAAT GGGATATCGG  
TGATCACTGG TCCACCTTC CTGTCAGGC TTTTCTGGG GCTGCTCTTG GAAATGAAGT CTAA

SEQ ID NO:352: (Length of Sequence = 270 Nucleotides)

GAAATTACCC ATGGTCATAT CTAGCCTACA AAGAAGAGAA AATACAGTGA TTCAAGTTTC ATTGTATTCC TCTCATTGAT  
ATATTTATCA ACCTTCCAAT TGAAGGAAGT GTCTTCTAGG CCTTTACAAA GAATGTAACC AGGGTTTAGG TATACAAGTT  
GCATATGATA AATCTGTAT GTTCTATAT AAATCTGTCC ATATTCCTCT TCTGAAATGC ATTATTTTTG GGGGAAATTA  
AAATGTGATG CAAAGATCCT TATACTTTGT

SEQ ID NO:353: (Length of Sequence = 195 Nucleotides)

GTGTGATTCC ATTATATGA AATGNCAGA ACAGGGAAAA CCTATTNAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT  
GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TNATTGCTTC ACGGGTGAT GACAGAATGT NCCAGAACGT GACAGAGGTG  
GTGCCCTACAC AACTTTNIGG NTGTACTAAA TGCCG

SEQ ID NO:354: (Length of Sequence = 388 Nucleotides)

GCCAATTTTT TTATTTTTGT AGAGATGGAG TCTCCCAATG TTGCCCAGGC TGGTCTTAAA CTCTAGGCT CAAGGGATCC  
TCCCAGCTGG GCCTCCCAA GTGCTGGGAT GATAGGCATG AACCACCAT CCCAGCCCAT TTCTTTTTTC CCTTTGCACA  
GTACCAGATA TATGGTTGGT ACTGCAGAAA TAATTTCCCC CTGCCCTCTA CATTGATCAT TTGATGACCA AATAGTGTCC  
GTCTAGCCAC TTATTTATGA TTTGTACAAA ACATTCCGCT TTCTGAGGTA GACAGTGATA TTCTGAAGCC ATCAGTAAGA  
GTAATTTTTT AGINTGTGTG AAAGTGGNCA TTCTTTGTGT AAAGGTCAGC CTGTCAAGGA AATAGCAT

SEQ ID NO:355: (Length of Sequence = 288 Nucleotides)

TAAAGTGAAG TATTGGGAAA GGAACATCT CACTCTGATA GATTTGAATT TNCTATTTCT GCTCTGTGAC AAAACCTGA  
GTTGATATGT GATCAGACAT TTACAAGGCC CTGCATTCTA CTTGNAATG GCTATAGTGG TGTTGAGCTG CTGTGAGATG  
ATTTACTGCA ATTTGTCACT TTTTGAACT GTTCCAAAT AGTCTGCTGA CAGCCCTTCC CCTCATGAAA ACATCTCTCC  
TTTTCCAGTT AAAAAACAG TCAAAAAACA CAAAAAAGG CCACCTCC

SEQ ID NO:356: (Length of Sequence = 401 Nucleotides)

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GGAAATTAGG TTGGTTATTA ACATGTATAG ATGGAAGTGG GGTGAAAAA AAAAGGAAAT GGGAAATGGAG TGGAAAGGGTT  
 GGGTGGGAGA GACACTTCAC AGTATTCTTT TTGTTTTGAC TTGGAAGATG TTAATATTTC ATAAACTTAA AAAAATGCAA  
 AAAAAAATA TCAAACTAG GTAGGAAGGA GAACAAAATG AAATATAACC AGAAAGGAAT AANCCTAACA CATTTTGAGT  
 GAATCACAAA GCCAAACCA AAAAGAGCTA ATTTAAGTCA CTTTTAACT TGGTGTTTAA CTACCTACAC TCAGTCTAAA  
 AACGGAAT AAGGGTAAAG AAATAGTGA ACTCTAGTTA GTTGGGTCTT TTCTTTACAG CAGTATGGGG ATGGCAACCT  
 G

SEQ ID NO:357: (Length of Sequence = 275 Nucleotides)

CAGACAGTGG ATAATAACA CCTCATTAGG AAACCGATCT CAGAATGANC TCTGGAGTAT GAAAAAGATC ATTTCTTTTT  
 GINCTGTAA CCTAGCATTC CTCTAGGCT TCINCTCCTT TAATTGAACC ACAGCTTAGC TCATGTATTC TTTTATTAAC  
 ACCCTGCTCT CATGTCCATA AGATTACAGG ATTTAGGAAA TNAGGCTGGT TTGAAGAGGG TAGAAAGCAA TAAAGGCAGN  
 AAAAAATAAG NCTAAAATCA GGGGAAGATG TATTT

SEQ ID NO:358: (Length of Sequence = 314 Nucleotides)

GTGAAGGAAG TATGAAACT GAGACTAATA TTATGAAGTC TTTTTTAAT TCTTTATCTT ATTGCCCATT TTTAACCCTT  
 TGGTGTTTGA AATGGAAAAT AAATATNCTC TTCGCGATAG ATAATATGTC AATAACCAA AGGTGGCCTT AACCAATAAT  
 TGGCCCAACT TTAAATTATT ACCCTAAAGA TATATAAATT ANCTAATCTA AAATTAAATG CAATTTTGCT ATGACTTAAA  
 GTGTCANTAA TCCTGTATAA GNGATCCNNT TTATGCAGTC ACTTAGGCAT GAAGTTGGCA ATTCATCTAA ACTT

SEQ ID NO:359: (Length of Sequence = 372 Nucleotides)

CAAGAGAGAC ATAGCAGGCA TTGAACAAT GGAAATGCC ACATAGCAGA AGGGAGTGAG GGGATCCAAA CTACAAGAGC  
 GACAAAATCA ACTGTGGATC CAGAGACGAA AAAATGTTCT GTAGTGCAA GGTAATCTGG TGAGATGAAA AAAAAAGAAC  
 CATTTTTAGA AAAANGGAAT ATTAGAAATA TTGAAGTAAA TATCATAAGT CATTCTATTA CAAAGGCATT AACTCCTTCC  
 TATCAATAGA ATGTACCAGT TTAAANITT TTAGTAGGAA TATATCTTT ATTTTATTAA CAGAAATCAN GGGACAAAGA  
 GGATTGTATC CATCCATACT TCCTACTCTT ATTGGGTTTG TCAAAATGTA GG

SEQ ID NO:360: (Length of Sequence = 395 Nucleotides)

GCATTCTTTT GATACCCACC TAATAAGAC AATCTCTAAA ACCAAATAAT AGGCTATGAA ATGTATTGTG AGTNCCTATT  
 TCATTCAAGA CAGAGCTTAC CTTTAAGTCT CCAGCTGAGA CAGTTGGTTT TATCTTTCTG AAAGCAGTTT GGTCAAGTGT  
 TTCAAGTAAA TCAAAAGATC GGTAAATCAA TTCCTTAGCG AATTGGATTA GACACTCTCA TTCAAATGG CAGTTTTATG  
 CTFACTCATT GTCTGAATA ANCTTAAATA CTTTATGCTA TCCTCCTGCT CCATTATTTA TGTAACTACT GGNCCCTAG  
 TATCTGCTT TAGNNCATAT AAAATCACTT NCAGGTATTT TCCATCAGG ACACAGAGGC AGGCACAAAT TAACC

SEQ ID NO:361: (Length of Sequence = 298 Nucleotides)

ATTTTTTGT GGGGAGAACA TTTAAGACCA TTCAATGTC ATGATGAAAG CTAATGGGAG AAGGCTTTTN TNCTACAAAA  
 ATTINCTTTA TTTTINCAAC TTTATGAGG TTATAATTGA TATTAACAAA CTGTACAGAT TTAATGTGTA CAGTCTAATG  
 AGTTGGGACA TATGCTTACA CCCNIGATGC GTTACCACA GGCAAGGTAA TACACATATC CGTCACCTGC AAGAGTTTCT  
 GIGTTCCCN NIGTTTCTCA TTTTGNTTTT TTCAAAATTT TACTTTATAG GGTATAG

SEQ ID NO:362: (Length of Sequence = 437 Nucleotides)

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ATGCTGGAAG TGATTTCTGC AGCTCAGGAT TTTTITTTTA AGCTACATTG AAAATATAGG TTTATTTTIT GINCAGGTTT  
 TNCTTTTATA TTTTITTNCT GCACAAAGGA GGAGGATTTT CCACTTACTC ATATCGAGGC CAGATTTTITA AAGCCAGCTA  
 AGGCAGCATC AGCTGTGCGG GATTTAAAGC CTATAGCTCA GCTGAAAAA AAGGTGGGGT GCGTTTCAT GTAATGGGAC  
 ACGATGCCCT TCTTGCTGAA CGACTGGAAA GAGCACAAGG AGCACTTTTC CTCTCCACT GCCCGCCGA GTTCTCGCT  
 CAGCTGAGGG GAGTCGTCTT TGGGCGGGGA TGGGATGATC ACTTTGTGG GCTTNTCGCT GATGGTCTG GAGGCTGCCA  
 AGAAGTTGAG GTGTAATACG CATCAATGTC CGTGGCG

SEQ ID NO:363: (Length of Sequence = 449 Nucleotides)

TGATTTGAAG TAAGCTTTC ATGCTTCACT TAGGGTGGGA AATTTTAAAT ATCAGAGCTT TCTTTGTTAG CAGCATATAG  
 TTATGCAATT TATTTAAATC TGCAGTGCCA ATCTTTTTT GATGGGTGTG CTTAGACCAC ACATTTAAGA TAATTATTAA  
 TATGTTAGAA CCGAATATAT TTINATGATT AGTTTTTATG TGTCATTTG ACTGAATTAA GAGATGCCCA GACAGGTGGT  
 TAAAACATTA TTNCTGGGTA TGTTTGTGAG GATGTTTCCA GAAAAGGCTA GCATTTGANT CAGCAGACTG AGTAAAGAAG  
 ATAAAGATAA TACTTGTCTAT GTGTACAGGC ATCATCCAAT CTGCTCAGGA CCCCAATAGA AAAAAAGGT GGAGGGAGAG  
 TGAATTATGT CTACCCCTT GAGCTTGGGA CAGCCATCTT TTCATGCC

SEQ ID NO:364: (Length of Sequence = 282 Nucleotides)

GACTGTGTAA ATACACTTTA TTTTCCATT TNCCCGCTG GCGACATGT GAACAGGCAG TGTGCAAAAT GGTGGCGGGC  
 AGTGTAGGGG GCGTGTGGAG AGCCCGTGG GTGNTGCCC CGGTCCCGAG GCTTCGTAACT ACTGAAAAGT GGGCAGCTAG  
 GAAGCGGGGA CGGAGCAGGG GTCCCCACCC AGGAAGCGCC AGGAGATTN CTGTAAACGC TACTCTACTG GAGGCTCCGG  
 GAGCACCGAG NGGGGCAGTC CCCAGGGTCA TGAGGCCCGG GG

SEQ ID NO:365: (Length of Sequence = 349 Nucleotides)

TTCAAGCATT TCTCTGCCT CAGCCTCCCA AGTAGCTGGG ATTTACAGCAC CTGCCACCAC GCCCAGCTGA TTTTGTATT  
 TTNAGTCAAG ATGAGATTTT TGCCATGTTG GCGGGCTGG TCTTGAACCT CTGACCTCAA ATGATCCGCC TGCCCTCAGCC  
 TCCTAAAGTG CTGGGATTAT AGGCATGAGC CACACANCT GGNCTTTTIN TCTGTCTCT AACTGTCTCC TTTTATTTCC  
 CTATGGAGCA TCTACTGAGC CCCAGCCGAG AGTAGAACA AACCTGCTGG CTGCTCTNAA GGCACCTATA GTCCAGTTA  
 GGGGNGACG GGTCACTTAA CCACTTAGT

SEQ ID NO:366: (Length of Sequence = 366 Nucleotides)

ATGCAAAGGA ACAATGGTGT TGCAAAGTC TTCTTTGAAT ATCAGAGACT GAGTCAATAA AAAAAATAGT AGAAAGGTGG  
 CTTTACTAT TGACAAAAGC CGGGTCAAA AAAAGTAGTT TAAGTCTTAA GNTGAATAT GCATTAAAGT ATGCAGGTAG  
 CAAAGATGTA ATAAATTTCC TTAAAAAAG AAATTAAAGT TTTATTTAGA ATCAATTTTA CNGTCATTG TAATTGACCC  
 NTCTGAGNAT TACAATAAGC AAGAGGAAAT TAAGGTGTTT TGCAAGAGCT GTATTTATAT TACNGTTTTT TAAAAACCAT  
 TTTCTGAATT ATCGTAATTA AAGCTCTCCC AACTCGTTTA AGTCAG

SEQ ID NO:367: (Length of Sequence = 391 Nucleotides)

GCAAAAACAA ACAACAAAC CTTTAAGTAC AGTAGTTCCA AACACACTG CTAAAGTTAT GAAATAATTG TGGATCATTT  
 CAAGTAAAAA TTATTAAAGG AGCAATAATT AACCACAAGG GGCATATAT ATATATNCNC CTTAGATTCC AGCAGAAAGA  
 CTAGTTTTAA GTAGTAACAT GCACGTGAA GTATTCTACA TTTTCAGTCA CTTAACTTT CCTCTCTCAG ATGGCTACAA  
 CTTTTTAATA TTCGAGGINT ATTTTATATC TAAGTAAAAG GATTCCAGAA TACTCCTGCC CTGCAAAACA GTAGTGTMTT

AGAAGNCTCT NGGAAGTGT GCTGTTTACC CTTTAGCAAA GNGNTACAAG AGCTATTAGT TGTAAATAA C

SEQ ID NO:368: (Length of Sequence = 370 Nucleotides)

ATTTCCCTTC TGCACCTGGT TCTCCGCTC CCCATTACA TGGTTTACTT CATTTTCCTC TTCATCCATT GGATTCACAT  
GTGTTCTAGG CCAATATTCC AGGNGTGCIT GGAGTAAAAG TCCTCCTAAA TTCAATTTTG GNTCTGACCC ATCAGGGCTG  
CTGAAACCAG CATCTTTTGC AGAAACCCAG GCAGCAAAAC AATCACTTTC ATCCAAAGTA ATAGTTAACA TCCCTGTTTT  
TAAGTCTACT GAGAACCAAT TTGGCACATA CACCATTTTA AATCTTTNCT TAATTTTCATC TTCAAAATCC ACTTTGCCCA  
GATCTTCAAC TTTACATGGC TTCAATACAT CCAATATGN CACATTATTA

SEQ ID NO:369: (Length of Sequence = 315 Nucleotides)

GACAGGTATT CTTTAGAAGT TTTTGTMTA CTTATGTTTT NCTCTTTTAC ATCTCCTTGT GAATTTCTGT CCCATTTTGA  
AGTCTCTCCT TGTTCCTGAC CAAGATCCCC TTGATGTTCT GTAGCCAAAG ACTGAGAAAA AGAGTTATTC TGAATGATGT  
AGAGGTTGAT AAGTCTGGTA AGAACTIGTT GGACATACTC CAAGCAGCAC TGCATTCAG TCTTTTGGGC TGTCTTCCTA  
CTCGGGGTG CTGTCCCTG AGTGACTACG GAAGGGGTCT GGATGATGGT TTCTTCAGAT CCCACAGTGG ATGCT

SEQ ID NO:370: (Length of Sequence = 442 Nucleotides)

AACACTTTTA CACTGCTGGC CTAATTTGTA GATATCCTCA AGAAGATTAT GAGTCATTCT CACTACCGGA ATCTGTTCTT  
CTATTTTNTT TACCAATGGG TGCACCATTG AATGTTGGCC ATCAATAGC AAATACCCTC TGCTGTATTT TCCTACININ  
GTTTAACTG GAGCCTCAGC TGAAAAGGTT TATGGTGTG CTAFTCAGTT TTATGAACCA TACTCTGAGG AGAATCTCAC  
AGAAAAGCAG AGACTTCTTT TGGGTTTAAAC ATCAGCAGAT GGGAGTCTG ATAGTTCCAA AACAATTCAT ACTAACAAAT  
GCATCTGTCT TCTTCTCAC TGGGNTTTT TTTGATGGCA TTCAGGAAGT TTCCTGACTTT TNCGTATCG TTAATTCAT  
CTCTGGGGCT CATGTCCTTC CAATTGAGGA GGATAATTC CA

SEQ ID NO:371: (Length of Sequence = 441 Nucleotides)

GACAAAGTCA CTCAGGGTCT ATTTACCAT ACCCCAAAGT AAAGGCCCAA ACTCCACCGG GGCCAAGTNT TTCTGGNTCA  
AAGTCACCAT GTCCCAAGA GAAGTCTAAA GACTCACTAG TTCAAAGTTG CCTTGNTCC CTCTCTCTCT GTGCAGGAGT  
AAAATCTAGC ACACCACCAG GCGAGAGCTA TTTTGGTGTG TCATCTCTGC AACTGAAAGG ACAATCTCAA ACTTCACCAG  
ACCACAGATC TGATACITCA AGTCCAGAAG TGAGACAGAG TCATTGAGAA TCACCATCTC TGCAGAGCAA ATCTCAAACA  
TCACCTAAGG GAGGTGGTTC CAGGTCTTCA TCTCCAGTCA CTTAGCTTGG CATCCAGATC TCCANTAAGG NCAAGATAGA  
GGTGAGTTCT CAGCGAGTCC TATGTTGAAA TCTTGAATT T

SEQ ID NO:372: (Length of Sequence = 362 Nucleotides)

GAGGTATTGT TGTTACTGGG AGGTTGAAGG GAACACAAAT TCAGTTATAA GTCCTTTTTG AATACTAAGA GGGGAATAAT  
TAGGGAAGCT AAGAGGGGAA TAATTAGGAG AAGAAAAAAA AACTTCAAAC AATTTTCCCT GTAACATGAT TTTACTTGCA  
TTTATAAACT GATTTTMTT TCTAAGCACT CCTTTGATAA TGATTAAGTG TGGGGTTACA TTATTTNAGG GTCGTCTAAT  
ATTTAAGGTG ACTTAAAAAC CTCACACAG TTAATCCCGA ACTGTGAAAA TTTCTCATCT TATCATCCCT CTGTTACTAT  
CAATTTTCTT CACGGTACAG ATTCTTTTAT AATTACTTCA TT

SEQ ID NO:373: (Length of Sequence = 306 Nucleotides)

ATTCTTTGTG CGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTTTTCG TGTGGAGTTG AGTTTCTTTG TAAATCTGG  
ATATTAGTTT CTGTGTAGAT GAATAGTTTG TGAATATGTT CTCCATTCA ACAGGTGGCC TCTTCATTCT GTTGATTGTT  
TCCNTTGATG TGCAAAAAC TTTNACTTTA ATATAGTTCT ATTGTTTAA TCTGTTTTT CTTACCCATG CTTCTGAGAT

CTTAGCCATA AAATGTTTGC CTAGAACAAT GCCCTGGAGT GTTCCCTG AGTTTTCTTC TGGTAG

SEQ ID NO:374: (Length of Sequence = 278 Nucleotides)

GGGTTTTGGT TGAGGTTTCT ACCTCATTAT CCAAGATATT INCITTCAG CCAGCAGAAA GAAAAAGGAG AAGAGCTGCC  
ACCCTTTGTA TCCAGGATGA TCTCTINTG AAATCCTTGA TTTAATTATA TCTGCATGAC CCTTTNCCCA ACTAAGGTTA  
TATCCACAGT TACCGGGGGT TAGCACTGGG ACATCCCTTA TTTTANGAAC ATGTCTCAGA AAGTTGCACA AAAAATTCT  
ACTACATCCC ATTGGCCAAT ACTTCTTACA TGATGACA

SEQ ID NO:375: (Length of Sequence = 321 Nucleotides)

GGTGACAGTA TTTTTGTGG TTTCTGTAGC TCCAGCCCCT CAGAAGGGAC GCCTACAGTT GGCAGCTATG GCTGTACCCC  
TCAGTCATTG CCCAAGTTCC AGCATCCTTC CCATGAAC TGCTCAAGGAAA ATGGCTTCAC ACAACACGTC TACCATAAGT  
ATCGTAGGCG CTGCCTTAAT GGTAAAGAAGT GTGGGGGGCA GGAGATGAGC CTCTGGGCCC GTTATTTAGA CCCAGAGTAT  
AAGAGTTGGG GGATACGGGG ATAGGTGACT CTTTCTCTG ACTTCAGAGC AAAAAAGA CATGACATTA TAGCAAGAAA  
G

SEQ ID NO:376: (Length of Sequence = 337 Nucleotides)

GGAAATTTA CAGCATGACT ACATATGTTA GGAAAAAAT ATCTAAAATC AATTAACTAA GCTTCCATCT TAGGAACTA  
AAAAAGAAG AGCAAATTAA ATCCAAAGTA AGAAGAAGAA AATAAATAAT AAAAATTAGA GCAGAGAGAA ATGAAATTAT  
GAACAGGAAA TCAATTTTAA AAATAAATGA AACCAAAAGC TGGTCTTTG AATCAATTAA TAAATTGAT AAGCCTCTAG  
CCAGACTAAG AAAAAAGAGG TAGGGCACA ATTACTAATA TCATAAGTCA AAGAGGGGAC ACCCCTACAG ATCCCATGGA  
TATTAAAGG ATAATAA

SEQ ID NO:377: (Length of Sequence = 455 Nucleotides)

GTTACAATTG AGAAAACATA TTTAATAAAT CATGTGCAAT TTINATAATG TTTCAAGCCC ATTCTTGTGTT GATAGCCTCC  
ACATTTATAT GGTAAAGTCA TTGTTGCTGT GTTCTTACC TATGACATTA TTTINATATC CCTTCATTTG TGGATCTTAA  
GATGTTGCAG AAGGTTCAAT CCTGTACCCC AATACAGATT CACTTCCTTT AGCTGCCCTT NCTAGCACCA ATATGCTTTA  
AAAAAAATG CGCAAACAAC AAGCAGTGAC AGCGGCAAT TCTCGAATG TCCAGATTAA TAACGTGAGC ATGCTAAAGA  
AAGGTGTGTG TAAATAGCTG GAGATGGTAT ATGGTCCAGA GTCCAGCATA AAATTATTTT CTTTCTGAGG CATTCCTCC  
ATTCCCCTAA CCCGATACA TGCATTAGGA ATGTAGCAAA ACCCTTCGGG GAACC

SEQ ID NO:378: (Length of Sequence = 349 Nucleotides)

GATGGTCAAG GTGTTTATT ACTGGACATG CTCTATGCTT ACTTGCTTGA AAACGCTCCA TTAGAAAATN AACTCTGAAA  
ACTATATGCC CAATGCTAAT AGTGGGTATT TATTGGTAAC ACTCTTTATC AGGTGCTATG ATTGTGTATG GCTTTATTIN  
CTNCTCATA TTINCTATAA TINCTACAAT GAACATGTAT GTATAATCAG ACAAAAAGC CAAGAAATAT CCATAAGTTT  
TNCITGGTCAT TCATTCATCC CATAAATACT TGCTGAGCAC CTGCTGTAAG CCAGGCTCCG AGCCGGCTGC TGGGTGGAGT  
GCCGCACCCC AGGGAACGGT CAGCCCTCG

SEQ ID NO:379: (Length of Sequence = 421 Nucleotides)

ATTTTGAATC ATATTTTACT TATAGGTTTG CTGTATATAC TGATTAACT TCTGAACCTA AAGATTCTCT ATAATTAAAC  
TAGCACAAAT ATAATCTGTC CCTTACCCAC ATGTGAAGAA TGCTGTGGG GGGAAATCCA ATATTGACCT TCACATTCCA  
CATGGAAAAT CTTTGTCCCC AGAGTGCAAT TAGGGTGATT AAAAATAAGC AGCTTTGTG AGTCTCAAGT TTGTTCCCCA  
ACAAGCAGC ATCAGCAACT GGAAATTTGT CAGACATGCA AATTATCCAG TCCCACCTGA GACTTCAGCC CAGATCTATG



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GATCAAAAAT TTTGGGGGTG ACCCTGGGCA ATATGGGCTT TAATAAGNCC CTAGGATGGG TTCTGATGCA TGCTCCAAAT  
TTGNGGATCA TTGNINCINT G

SEQ ID NO:380: (Length of Sequence = 311 Nucleotides)

ATTTTNAGAT GGAGTCTCAC TCTGTGCCCC AGGCTGGAGT GCAGTGCCAT GATCTGGGCT CACTGCAACC TCCACCTCCC  
AGGTTCAAGC AATCCTTCTG CCTCAGCTTC CCCAGTAGCT GGGATTACAG GCACCTGGCT AATTTTTTTT TTTTTTTTTT  
TTTTGAGATG AAGTCTTGCT CAGTCGCCAG GNTGGAGTGC AGTGGTGTGA TCCTGACTCA CTGCAGCCTC TGCCTTCCGT  
GTTCAAGCGA TCCTCCTGCC TCAGCCTCCT GAGTAGCTGG GACTACAGGC ATGCACTACC AACTTAGCT A

SEQ ID NO:381: (Length of Sequence = 442 Nucleotides)

AATCTGIGAA CATATATTTT NATTTATCTT AAATACCTAA GAGTGAAATT NTGGTTTCAT ATGTGGGTAT ATATTCAACT  
TTGTAAGAAT CTACCAAAAT GATTTTCCAA GTATATGTAT AATGTTATGG TCATCAGANC TACATGATAG TTAGAGTTGG  
TTAACATACT CACTGCAATG GATTGACTTT CCTGTGATTC AGCTATCCCA CTCTTAGGCG TATACCCAAG AGAAACTCAT  
AATGTCTTGG TGTGCAGCTT GTATGCTAAT GATTTTAGTA GTATTTTTTG TAATAGCCAN AAGGTGGAAA CANTGAAAAC  
TTTCACGGAA ATGATTAAAT AATTAACAAA ATATTATATA TCTATATATG ATCCATTAAT CAATGAAANG GANTGAAGTG  
GTATACAGA AACACCACAG GTTAACCNNT GAAAGTATAT TA

SEQ ID NO:382: (Length of Sequence = 337 Nucleotides)

AACAGACTTT GGAGCCANTC CCATGTGAGT TTGAGTCTCA GAGTGACTCT GGGCAAGTNA CTTAGGCTTT CTGAGACTCA  
CTTTCCTCCT TTATAAATCA GGAAGAATAA TCCATGTCTC ATTGAGTTGT TAATNAGACA TAAATGAGAT AGTGTATCTA  
AAATGTGATT TGTTAAGTCT AATACGNAAT AGATGCCTAT TTGAGTGTTC CTNATACTCA GGATGGTTCT TGGGATATAT  
TTNCCCATGG AACAAAAAGC AGACTACTCA TGACCACTCG GATTTTATGT TCAGCCACAT TAGGGCTCTT ATGGCCTGAC  
CTGAAGACCT ACCATT

SEQ ID NO:383: (Length of Sequence = 421 Nucleotides)

GTGAAACTGA AGAAGACCAC GACAAACGAT CGCTCAGCCC CTCGCTTTTC TTAGGTTTAC AAGAAATGCG CCGGTGGGGA  
ATGAACINTT TCATTAATAA AACCTAATTT GTCTTGATCC ATTCCACTCT ATAATAAAC AAAAGATTTT NTAGGCAACT  
CGGAATATAG CTCCTTTTGA AGTACTCGAC ACCTTTAGAT AAGAATTAAA ACCAACCTAT GTAACGACA TAATCTTGAT  
CTNTTAATTT GTAAATATIG ACANTTINCT TTCTGCACAT TTAAATCTTA GTTTCCCTTT TGATTTINCT GAAGGTGCCA  
AATTCATTT AACINCITTA CAAGTCTTTG TAAAATTTTA AATGCATAAA GGGGGGTGG GGGCAGGGG ACCNCGGANG  
TAGTTTAAIT TTCGGAAAGG G

SEQ ID NO:384: (Length of Sequence = 420 Nucleotides)

GGACTCCGTT CCCAAGAATA AGTTTTGCTT GGGCGGAAAG TATGTGGTTC ATCCGAAAAA AAAGAAATCA ATGATTTGTG  
GCAGTCTTTC ATGTGCTTTT GGGCAATTNC ATATCTTCTT TGGAGAAATA TCAATTAAGA TCCATTGCCG TATATACATA  
TATTAAAATT ATGGGTATG TATTATGGCT CATACCTGTA ATCCCAATGC TTTTGGATGT TGAGGCGGGA GNTCACCTG  
AGGTTAGGAG TTCGAGACCA GCCTGACCAA CGTGGTGAAC CCTGTCTCTA CTAAAAATAC AAAAGTTAGC CAGGCATGGT  
GGCATGCACC TGTAGTCCCA GCTACCCAGG AGGCTGAGAC AGGAGGAATT GCTTGAACCC ANGAGGCAGA GNTTCCAGT  
GAGCTNAGGA TTGTGCCACT

SEQ ID NO:385: (Length of Sequence = 404 Nucleotides)

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GTGACAAATG TTAAGAAATT GTGTGTCAAG CAAAATACTT TAGAGGCCAA TGGGCCACAT GTTTTAAATA TCAAGAGATT  
 ACACACAAA TTINTTTTCT AGCTTCTTTT GAAAAATCAG AATTGGGAAG ATGTATTCAT GAGTGACTGC TGCCCCCTTT  
 GGTGGGACT CGTTCCTTCA GGTTCAATTAC ATGGTCATCA ATAACCATTT CCTTGGTCCC TGCTTTTGTG TTGTCTGGNC  
 TCTAAGCATT TGAATTTTTA GTATTATAAG AAAACTTAAT ACTTINCTAT CAGTCACCAC ATACATGTGT TTCTATCTGT  
 ACTACGNCCT ATTAAGACN TTTTATCAAT AGCCNCCATT TTGGAGGGGG GGATTTCAAC TGGTGCCCTG ACTAGCAAGG  
 AATT

SEQ ID NO:386: (Length of Sequence = 267 Nucleotides)

GTCTGTGGA CATTTACGTG GTATCTTTAG AGCAAACACA GAGTGGTTGC ATAAGCTGCA GTGTTTTAGT ATCGGTGGGA  
 CTGTGGCATG GCGTAGAGGA GTNACAGTCG CAAACTGATG GCCCAGCTCT GACCTCCAG GCAAGTGGAC TCCGAGGAGT  
 ACCAGCAGAT CTCCACAT GCGTCGGGGA GGGCTCTGGG GAGAGTCAGT GGCAGGAGA GGGTCAGCTG TGCAGGCTCC  
 AGGGCCAGC CCGTGCTTT CCCCTCT

SEQ ID NO:387: (Length of Sequence = 384 Nucleotides)

ATTTTAAATG ACATTTTATT TAGGCCAGGG GACCAGGTAA CATTTATTTT AGGAGGAGAG CAAAAGGTGT TATATTACTG  
 CTCTAATTA CTTAGAAGGA AAGCATTGTC TACACTGCCA TTATGATTGG CTGCAGCAGT TCAACCTGGC TCTCGGAATC  
 TGCCATTAGC TTGACAGCAT ACAGAGCACC ATATCAGGGT TACTATGGGA AGACTCTATT GTGGCATCAG AAACACAAAA  
 AACACTGGAT ACAGTTAGTT TCTGTTGACA GTTTCAGAAG AAAATCCAC AGATTGGACA GGCTGCCTGC TGAAAGGGTT  
 GTCACTACAC ACAGCATGCC CTGAACCTG GGAATGAAGT TACCCCTATC TGTGGTGATC AGGA

SEQ ID NO:388: (Length of Sequence = 345 Nucleotides)

CTAAGATCAA ATGCAGGCAA AAGTGGTGAA TTTTACCACC TGTTTGTAAG TCTGGGTTTA TAACTTTACC GTAAATCACC  
 TAGAACACAG GCTAGCCGAA TCGGGGTGTC TGGTATGGCA ATATCCCGAG AGCTAACCTG GGGCTGGGGC AATGTTCTGT  
 GGCTGCTGCA CTGCTCTA ACAGGCCAGT TTAAGACGTC CAGCTCTCAG GGCCACATTC TCCAGGACAC AGCAGGGAGC  
 TCACAGTAGC TCAAGACCCG GCCCAGCCTC CATCCCCAGC CTGGAGCTG TCAGTGCTCC CAAAGGCTGA AAGAATTCCG  
 TCTTGGCTGA GTGGACAGCC CCTT

SEQ ID NO:389: (Length of Sequence = 156 Nucleotides)

TAACCTGCCC CAGCAGTGCA TGCAAGGAAGA CTTCCTGGTG CATGAGGTGA CCAATCTGCC GGTGACAGAA GNACTGATTG  
 AGCGGGAGAA TGCAGCCAG CTCAAGAAAT GCGGGGAAC GCGGGGGNG CTGCAGTATC GGCCCTCAG GCGACT

SEQ ID NO:390: (Length of Sequence = 364 Nucleotides)

GAGTCTCGCT CTGTACCCA GGCTGGAGTG CAATGGCATG ATCTCGGCTC ACTGCAACCT CCGCTCCCG GGTCAAGTG  
 ATTCTCTGCT CTCAGCTCC CGAGTAGCTG AGATTACAGG CAGTGCCAC CAGCCTGGC TAATTTGTA TTTCAGTAG  
 AGATGAGGTT TTGCCATGTT GGCCAGGCTG GGCTCAAAT CTGACCTCA GATGACCCG CTGCTCAGC CTCCAAAGT  
 TCTGGGATTA CAGGCATGAG CCACTGCACC CAGCCCAACA CTGGGATTCT TTTATCCGCT GGCTGGCTCT TCCGAGTTG  
 AATTGTGTGA CTCTTCCCC TATCTGAGGC CCAGTTTTTC TTCA

SEQ ID NO:391: (Length of Sequence = 325 Nucleotides)

GAGTGTCCAG ATGATGGCAG TGATGGCCCA TCTGGAGCGG CTGCTGTAAG GACACTGGCT GCAGCAGGGG AGGCACAGCC  
 AGGCCTGCGC ACTAGGCAGA GCTGGTGTGG GAGCCAGGAG CAGATGAGAG CCCCCTTC TACCAAGTTG GCAGTGAGA  
 AGGCCGCACT CCGGGTGCT GATGCCGAGT TCAGCTCCAG ACCCTGGCAT CCTGGGCTN TCAGGGGCC AGGAAGCCCC

CCACCCCTGC AGGNTTCAAA GGGCCTGCTT CCCACTCCTT GGCCTTTCCC TCCTCCTGGG AACCATTCTG GGGCAGAGCA  
AAGCT

SEQ ID NO:392: (Length of Sequence = 371 Nucleotides)

ACATCCACAC AAGTACAAGA ATACAGAAGC TTCTCTAGTC AGGATGCACT AAGCACCTAA TGAGTAAACA AACTTCAGCA  
TATCCTCATT GTTCTCATGG TATTAATTIG AAGATACTTA CCTTCGAACT AAATCTGGTT TTAGAAGAGC TGCTTGTTGT  
TCAGCTCCAA CTGGTTGGGA TACAGGCTGT AACAGTACA GACATAAAAC TTGCTATGAT AACAGTAAAA TTCAAGCTAA  
ATATACAATT TGTTACTATT CAGAAAACAC GATAGTTTTG GTTACCTTGC AAACCTGGTA GGAATATCTA TGTTATTGAA  
TGTCGTATC AATCCTATTA TTAACATTAT TACCAAAGGT AAATAAAATT T

SEQ ID NO:393: (Length of Sequence = 404 Nucleotides)

CCTTTAGTA GCTTCTCTGA GGTGAAACCA CTCTTTTTTG ACCATCTAGC GCANTCINTC TTTACATCAA CCATTATTTT  
CAAGTGTAGT GTGCTTCAGA GTCTGAAAGA GCTATTGCAG AATTGGCTGT TGTTGGCTTTC TATGGACATT CACATGAAAC  
CTGTTACAAA CAGTCTCTTA GAGACAACCT TGGGTGGATC CATGAACCTCT GTGTCTAAAC TGATCCACTA TGTAGGGTGG  
CTATCCACTA CTGCAATGCG CTTGGAGAGC AACAACTCTT TCTTGCTGCA CTTTATTTTG GATTTCTATG AGAAGGTGTG  
TGACATATAT ATAAATNATA ACCTTCCATT AGTGGGTATT GTTCTCTCT GGGGATCCTT CTATTCTGCA CTCCTCAGCC  
TGGG

SEQ ID NO:394: (Length of Sequence = 416 Nucleotides)

GCCACACACT GGAGAGGGAG AGCTAGAGAG TGAGACAGCA GGGGAGCTGA GGGTGAATGG CTGCTGTTAG AAGCCCTGGA  
GACAGCCTGA GGTGAGAGCC CAGCCCCACT CCTGGCTGTG TGATCTTGAG CAGGGCTGTT AACTTCACTA GGACTTGGTT  
TCGGTTTCTC ATAGAGAATA GGTACAGTGT GAATTAAATA TATATAGCTT GAATAAAGTG CCCAGCTTGT GGGTAGCTGC  
TGCCATCATC ATCACCATCA CCATCATCAC CATCACCATC ATCATCATCA TCATCATCAT CATCATCATC ATCATCATCA  
TCTCAGGCAC AGGGGCTTTA AGGACAACAT GCCCAGTTTA AGGANGAACA CAACTCTCTT CATTTATAGC GNCCCTCCAT  
CAGTGAGTAG ACGCTT

SEQ ID NO:395: (Length of Sequence = 315 Nucleotides)

AGAGATCAAA TGCTTTAAAC ATTATGGAAT AGGAGTGTAT GACTGACTAA CATCCAGTAA TCATTAGGGA AAACAAACAT  
GAGTGAGGNC AACTGAAATA ATTATGATAC AATTAAAGGT GGTAGGTAC ATTTGTATAG TTCTTTAAAA TATGCATTAT  
TCCACATGAT CAGAAATATA AAANGANTTA GACAGATACT GGTAGAGAGA CAATTAATTT AAATTTGTAA CATATTGCTT  
GGNGCAAGCA TTCAAGTTGA GTGCTTAATG TGTATCGGTG ACTGCACTGT GCAAATAAAT TTGGGGTTAG TAAGA

SEQ ID NO:396: (Length of Sequence = 409 Nucleotides)

CTCCAGTTCT CAGTTTAGGG TGCTTCTTTC CCGGCAGAG TTTTTCGAGC TCATGAAGGT GGAAGTCTG GAAAGTACTC  
TAGAAAAGTC ACTCCAAGCA AAGTTTCCTT CAAATCTCAA GGTCTCCATT CTCTTAGACT TCACGCGGGG CTCACGAGGC  
CGGAAGAACT CCCGCACAAT GCTGCTCCCA CTCTGCGGA GGTTCOCAGA GCAGGTCCGA GTCTCCCTCT TTCACAGGCC  
GCACCTCCGT GGGCTGCTTC GGCTCCTCAT CCTGAGCGC TTCAACGAGA CCATCGGCCT CCAGCACATT AAGGTGTACC  
TCTTCGACAA CAGCGTATC TTGAGCGGTG CAAACCTGAG TGACTCCTAC TTTNACCAAC CGTCAGACCG NTACGTGTTT  
CTGCAAGGA

SEQ ID NO:397: (Length of Sequence = 414 Nucleotides)

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ACAAGCTGTG TGACCATAGG CAAGTTTGAC CTTTCIGAGC TGCCATTTTC TCATGGTAAA AGAGAGATAC TAGAGGAACC  
 TGCTCACAG GATTGTCATG GAGAATAGAG GAGATGATAC AAGTGAAGCA CTAGGCAGCA CCATACTTGG AACTAAGGGA  
 AAGCCCGCAG TCAATGTTCA GTATTGTTAC ACTTGCCAGA TTGTGAAAGA GCGCAGGCAA CCCTTGAGTT GAGCTCAACG  
 CTGGAGCCAA GATCAATGAC AGAAGGATTT TGTTTTGAAA CAGCAACTAA TGACCAGAGA GAGGAAATGG GTCATGAAGC  
 TCCATGGTGC CTTTCATGAA AATGAAATGT AAGGGCGTGA TTCAGGAAAA AGGGACCACG ATCAATACCA GCAGACTCTT  
 CCCTATGCAC TGGG

SEQ ID NO:398: (Length of Sequence = 400 Nucleotides)

CATCAAGCTG GGAATGCCCT AAAGTGGGGG CGTGAGGAAG AGAAGGGGTG ATACCTAGAG GCTGGGGTAT CTCTGTCCCA  
 AGGAGACAAA CTATAACAAG ACCCAGCAAC TGAAGGGTTA ACACCTAGCA CAGACGTATA CCTCCAGGT CCTAGCTGCA  
 TTCTTAATTC TGCTTCATCT ATGCTTGAGC ACTACTTGTT GTTAAATATA CTTAATATCA CTCTTAGCTA ATTTCTCTA  
 TGTAGATTTT TATTTATTTT TGAGGGCAAC CCAACTTCCA GGCTCTTGA AGGAAATAGA CTGCAGCCCC TAAGTGTGAT  
 CAATACTTAA TTATAACAAT AATCACTAAT AATAACTTGT GCTGCTTCAT TGTAATAAA ATGTACACTT TTACATTTT

SEQ ID NO:399: (Length of Sequence = 324 Nucleotides)

AAATATTTAC AATTTTACAC CTTCAGGAAG GCTCCAAAT ATAAACACTG TACCTCTCCC TAGAGAAAAA AAAATTATTC  
 TTCTCTTCAA AAACAGGAAT ACATTCATTT TTCTCAGTGT TGTGAATCAA GTAATTATAC AAATAAACAT CTGAAACATT  
 TTCTTTTTTA ATATATTTAT ATAATATATA TTNTAACAG CTTTACAAAT AAAGGCAACG GTCTTTTCT AATTTTCATG  
 CCTCTCAACA GAAGGGTACA TGATGCTCCC TGAATCCAG GGNATTTTT TNCTCTCTAT GGTACTTTGT ATTTCACTTT  
 ACTT

SEQ ID NO:400: (Length of Sequence = 388 Nucleotides)

ATTAAATCTG AGTTTGTGTT GAGCATCTTT CAACATGTAC CATATTTATG ACAATCTCTT TCCATAGGAT CTATCTGTNC  
 TGCAACAAGT ATTGATCTTA CAGTAAATTT TTTCACAAAT TCATTAGATT CTATGCTCTT TTTCCTGGTA GGAATTTTTG  
 TGCAGGTAGC TATCTCTTGC CCTAGATTAT TCTCCTTGTT TAGCTGCTGA TTCTTAACT GGCTCTAGA TTCCAGATT  
 TCTTCCGGTA CAGACTTTCT CTTTGCAAGT NCTTCCATCT CTAATCTTTG AGATTAACTT TCTTTTGAAA TGCTCTGCTG  
 CTCTACTCTT GTATGCTTGG GNCCACGTT CAAGCTTCCC ATCTAGCAAA ACCAGGGTTT CTAATATT

SEQ ID NO:401: (Length of Sequence = 339 Nucleotides)

GTTTATTGCT CAAAACAAG AATTCAGAAG CAAAGGTGGA GAGACTGTGG GTTGGGGAGA TGGCAGGAAG GGGGCAAGGC  
 CTTGTCCCAG CTCTCCCTTT TGCTCTCTT CTGACCTCC TGGCCGGAGT CAGGCCTAGG GCCAGGGCAT CTGGGAGGGG  
 GGCACCTTCG TGGCCAAGGG AACAGTAGAG CTATCGGGG CAGTCTTGA GGGGTGCCCT GGGCAGGAGG GGCTGCAAGA  
 TTINCAGGGA GGCAGAGTTC CCTCCCGA ATCCAAAAGC CGGTAGGGCG GGGGGCAAGG CCCCTCGTTT GGCAACTNAG  
 AAGAGGCGGC TTTTGGGCG

SEQ ID NO:402: (Length of Sequence = 400 Nucleotides)

TGTCCAGTGT ATGAGGACGT CCCAGCGAGA AATGAAAGGT TCTATGTTTA TGAAAATAAA AAGGAAGCAT TGCAAGCTGT  
 CAAGATGATC AAAGGGTCCC GATTTAAAGC TTTTCTACC AGAGAAGACG CTGAGAAATT TGCTAGAGGA ATTTGTGATT  
 ATTTCCCTTC TCCAAGCAAA ACGTCTTAC CACTGTCTCC TATGAAAACA GCTCCACTCT TTAGCAATGA CAGGTTGAAA  
 GATGGTTTGT GCTTGTGCGA ATCAGAAACA GTCAACAAAG AGCGAGCGAA CAGTTACAAA AATCCCGCA CGCAGGACCT  
 CACCGCCAAG CTTTCGGAAA AGCTGTNGAG GAAAGGGAGG AGGAGGACAN CTTTCTGAC CTTATCTGGG AGCAACCCCC

SEQ ID NO:403: (Length of Sequence = 416 Nucleotides)

AGTTGACTGC TCTGATATGG AGAGACCTGT TAGTCTTGTA TATAGTGCCC AGCCGGAAAA AGCATCTCTT GAAGGTTAGG  
GCATTTTGTG AGGAGAGCTC TAGGGCTATA TCAGTCTGGA GGTATGATCT CTGATAAAGA TCATAATTCT CATCTCAGTA  
ATCTTCTTTA GAACAAAACA TTCTTCATTG TAAGCTTCTC ATTAACGTAA GGCCACCTGA TCTGAGATTT TGGCTCTTAG  
AATACTCTTT NCTGTGTC TC AATCCTCATA TGGCTTACCT CTGAAATATA GAATATATTT CCTTGTGTAG CCTGGTAGAG  
TTGGGTTTGG TTTTGTTTT CAAACAGTAA CTTTTATTG ATTGTAAAAC TTCCAGATTT CTGAGATGCC GCCTTACCAG  
TCCTAAGGTT GATTTT

SEQ ID NO:404: (Length of Sequence = 368 Nucleotides)

CCTCTNACTC ATTGTGATGA GTAGGGCGGA GGGCTTCACT GCCTCANTTT CCCCAACTTT GGACCTTAAA TCCTCTCCTG  
ATGCCTCTCA GCCCAGCCAG GAAGGAGAGC TAAGACCAAG AGGGATTTAA CAGATGCAGG ACACACAGCC TTGTCTCAG  
ACCCCCAAG TCTGAGAGAA GCAAAACACT CACCTTGAGA GCCTCGGAC TTGGAGGTGA GGTGCAGAAC CCAGGCTGGG  
TGTTGTCTGA GGGGTGGTGG GGGTGGTGG TGCTGGGTGG CTGGCTGGG AATACITTTT TTAAGCTAAG GCTGGGGCTT  
AGGGGAGGGC CAGAGGAAGG GTAAATAGTT TGCCTGGGG GGTGCTGG

SEQ ID NO:405: (Length of Sequence = 395 Nucleotides)

GACAGGTCTT CACTCTTACC ACAAAGCTCA AGTCAGCTTG GCCTCTCAAG TGGAGAGATA ATCGTTCTAT AGCAAGAAGT  
ACAAAGATTCT TCTGCAGACA AAACCAGCTA GCCAAGGTTT CACAACATGT GTACACGTAT AAGTCTGTG GATCAGAAGA  
AATATGTACC CGGAATCAG ATGTAGCCAG CCCACATACT AACAAACATC AAAGCAAGCC TAGTCAGATT GAGTCCCAT  
TGAACAATCT TTATAAAGT TTCTTCATGT TATTTACAAT TCAAAGTAAA TTACTTTTAT AAGCAGCTAG GGAATTCTT  
TATTTAGTAA TGTCTAACA TAAAGTTT ACATAACTGG CTTCTGTCCA AACCATGGAT ACTTGAGCTT TGTTG

SEQ ID NO:406: (Length of Sequence = 358 Nucleotides)

GATACCTTAA TCTAAATTTT ATCTTAATTT TTATTTTAT TTCTTGTCT AAATTTTAT CTAAAATTTT TNCTAGCTCT  
TTATTACACC AAGACAGCTT CACATTTTAA TTATATATT GTACATCTCA TGTAAGGNAT TACCGTATAT AAGCTAGTGT  
CATAACTTAA GTAGCCACAT TCATTCAGTA TGTTTTATGT TTCTCTCTG ACTGGATCTC TGATACATTC TTCTCTGTTC  
TAGCTGCTTT TATGCAAAAG GGCATTATAT GTTTGTCAAT CAACCAGGCT TCTGTGACTG TTAGAAGGA ATTATGTAAA  
TATATAATCC NGTGGCTGT TTCCTTTGG CCATGTTT

SEQ ID NO:407: (Length of Sequence = 294 Nucleotides)

CTGTGTATAT TTAGTATCTT TNATTAAGAA GACTGGTGA TATTTGCCCT CAGCTAATTT ATAGAAAGGA TGATCATCAA  
TGTCTCTAGT TTTCTCTTAA GTGGCTTGTG TGTGCAGGTA CATATAAAAA TNCAACTATA CAAATAGCTG GACAGTTGAG  
TCTCAACTAT GAAATCTTT TCTGGGATCA AGATCTAAGA AGTTGGTGTG TGTATGAGTG CAACCCATCA TTCTATCCCC  
TAAAAATCTG GGGTTTCTCA GCCCAAACAT TCNCACTAGT AAAGTCAAGT TTCA

SEQ ID NO:408: (Length of Sequence = 367 Nucleotides)

GGCAAGGAAA GAGAGCTTTA AATTGAAAGG TTAATTTCTT AAGAGGAACC TGGGCTGAAT GACTGCAGTG TTATACCCCTC  
CAATCTTGTG AGGTGGGCAT GGAACACTGC TTGTATCACT CTGTGCACGG TATAAATCCA TATATCCACA AAAACACACA  
TCCATCCATC AACATATACA TGGTTTGGGA TGAGCAGGTC AATAGTTTTG AGAGGGAGTT TGTCCTTTT TTTTCTCAT  
TATACTCTTA AATTGTTGTC AGTTATCAA CAAACAAACA GANAATTGT TTGGAAAAAC CTTCATACG CCTTTTCTTA  
TCAAGTGCTT TAAATATAG NCTAAATACA CACAGGCTTG AGGCAGA

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SEQ ID NO:409: (Length of Sequence = 233 Nucleotides)

AAGAGACAGG GNCATATTCT GTCAACCTGG CTGGACTGCA ATGGTGTGAT CACAACCTAC TGCAGCCTTG AACTCCTGGA  
CTCAAGCANT CCTNCCACCC CAGCCTCTCG AGCAGTTAGG ACTACAGATG GGTGCCACCA TGCCCAGCTA ATTTCTAAAT  
TTTTTTTAGA GACAGGGTCT TGCTATATTA CCCAGGCTGG TCTCAAATC CCTGGGCTCA AGTGATCCTC CTT

SEQ ID NO:410: (Length of Sequence = 295 Nucleotides)

GACAGGGGGT GGGGAATTCT ACTCCATGGT ATCTTCAGAG CTAGGATAAT GCTCCTTATG CAATCCCACT GCATATGACC  
ATGGCAGTAG AACAGTTCA ATTACTACAC TGGATGCGTT AAGTGTGCTT TCCTAGCAGA AAGCACCAGG GTGGAGTCAA  
CAGTTACAT GCTAATACTT GGAAGTATTT CTAGAAGGGG GTGCTCAATA GAGGGCAGAC ATGATGCAAG NNCTTCATAC  
TAGAAAGGTG TCCTGTGTGT GCATGCACAG CTGGATGGGG GCACACAGGA GCAAG

SEQ ID NO:411: (Length of Sequence = 304 Nucleotides)

AATAAAAAGA CCATTAACCTT AAAGTGGTGT TAAATGCTTT GTAAAGCTGA GATCTAAATG GGGACAAGGC AGGTGGAGGG  
GAGGCCAGTG TACATGTAAA TGCCACAGC CCAGCATTTG GTTTCCTCC CAAGNCCCA GCACCAACCT CTGAGCCCAA  
GACCTTGCCT GAAAACAAGC AGATACCGAT TGNITCATCC TATTTATGGA CATGTAGGTC TAGITGCATT TTCCTNGGG  
GGAGGGGGGA AGGTGAATTA TGGTAACTTT TAATGATCTA TTCAGGCAGT AGAGCTCTTA AGGG

SEQ ID NO:412: (Length of Sequence = 250 Nucleotides)

CAGGTGCGCA CTATCACGCC CGGATAATTT TTTTGTGTTT TAGTAGAGAC GGGGTTTCAA CATGCTGCTC AGGCTGGTCT  
CAACTACCGA CCTCGTGATC CGTCCACCGC GGCTCCCAA AGTGCTGGGA TCACAGGCGT GAGCACCNT CTGNCACA  
GGTNGAGACC CTTCTATAT AAGAAAGAGA AAAATGTCTC TNANTCACA GAGAATGCTA ACAACGGGGG AAAGCACAGA  
CACAAACCTG

SEQ ID NO:413: (Length of Sequence = 337 Nucleotides)

GTACTGGGAC AAGGAAGGC AATCACAAC AACTGCCCTC AGGAAGAACT CAGTCCCTGA CTGTAGTGTG TCTTCGGGGG  
AACCAATGCC ACCNCTCC ATCCCCAGA CGGGCGAGGG GCTGCACCTT TAAAGCAGGC CATTGGGCCT TCCGGGCTCC  
AGGGCCAGCC CACCCGNTC CCGCTGGTGG ATCTTCTGGT GCTGCAGGAG GTGCTGCTTC TGGACAAGC TCTMTTACA  
CTCAGTGCAG CTGTAGGGCC GNTCACCCTG NTGGATGCGC TGGTNCAGNA CCAAGTCAGA TGGGTGACTG AAGCTCTTGC  
CACAAGTAAC CACAGAT

SEQ ID NO:414: (Length of Sequence = 304 Nucleotides)

GGTTTAAGAA CTGCGTTTGT GNGCCCAATC TTTGGTGAAA AATATTTTGT GGTATCTTT GAAAAAATC CTTTCAAGG  
CAGACAGCAT TTTAATGCTT TGTCTGTTT TCCTGTTTGT TCAGCTCTGN CACCAGCCTG AAAGATTTAA AAATNCAAAT  
TAATGGAGGN TTATTTGTCC TMTACTCAGG TCACATTTCT GGGTTTTAAT GAAGNGACAG ATGCTGCTCA TATACAGGAT  
TTAGTGCAG TTTCTTTGGA ACTTCCAGAT ATTCTGAATT CACTCCACTT CTGCAGTCTA AATG

SEQ ID NO:415: (Length of Sequence = 315 Nucleotides)

CGTTGTGGAG TGGGTGTCTT TGGATAGAAG GAGTGAGGAA CTGGGGGAGG AAGGCCTGGG GGATCCCCTG GCGGGGCTAC  
TTCTGGGCC CGGNATGGAC ACCTGGNAGC TGCTGCGNIT GTTGGGGTCC TGGCAGGGGT GTGGTGTGGC CCTCACCCT  
CTGNTCACCT GCTCCTTCT NACAGTGCCT GGAGAAGTTC CCTGTNATCC AGCACTTTCA AAGTTCGNA GCCTNCTGCC  
CATCCATCCT GTCACGTGG GCTAGGAGGG GNCAAGCCGA AGAGCCACCC ANGNACANT TCCTGTGCCT GCCTT

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SEQ ID NO:416: (Length of Sequence = 343 Nucleotides)

GTATTCAAG TGTTTTATTT GCTTTCTGTG GTGTCAAATT TGGGGTCTCC TAGAGCCCAG CCCAGGCAG AATCOGGCAT  
 ATCCTTCTCC GCCTGGGGGG CCCGGGACAC AGGAGTTTCA GAAAAGGCAC TGGCAAAAGT NCTAGGGCGG GGGTCAGGGA  
 GAAGCCACAC TGAGCCTGGA GGGACCGGGC CCTCCTTCGG CGGCAGAAAA CACAGTCACC TTTNGCAGGG AAGGGTTTTT  
 NCCTAGAAAG AAATTTAAGA CAAGATAAAA ACCTGAGATG TTAGAGGAGC CCCCAGAAC AAGCCGGTGC TNCCTGGGC  
 AANCAGAGAG TGAACTCGGC TTT

SEQ ID NO:417: (Length of Sequence = 202 Nucleotides)

TATTTCTCTG TGAAGGGG GAAAATAAAA GGAATAAAT AAAAACGGCA CAGTTGACAC AAAAAAAA ACCAATGATG  
 GGGAGGACGG GAGGTGGAGA AGTAAATGGG GGAGGGGNTC CCATTACAGC AGCAGGATCC AGTNACCCGG GATGCTCACA  
 TCINTCCCTN ACGTGGGCGG TGTAGCCCT TCCTCCCAAG GT

SEQ ID NO:418: (Length of Sequence = 299 Nucleotides)

CACCAATTGG CTGCAGAGCT GTCTTCAGGA TCATAGGCCA CTGCCAGAGT CTTGGAGAGA GGGAGAGATG GAGAGGAAGG  
 GAGTGAGCTT CGTGGTCTG ATTCTGGCT CAACGACGCA GGAACCTCAG GTTCAAAAGC AGCTGACAAG AGCCAGAGA  
 CCGTCTCTT GCGTCCGGC AGAGCCTTCT GGTGGCCOGA CACCAGGCA NGGAGGGAAG GCCCTGAAAT CCGTTTTTIN  
 TGGCAAGATT NGTTCCAAG AGGAGATAAT GGCTCAATT TGTCTTCCA AGTTGATCA

SEQ ID NO:419: (Length of Sequence = 223 Nucleotides)

ATTGTGGGA AGGTAACATT TTTCCATGGT TTTNATTTIN CCCAAAAGTA TTTATGTATT GATTTATTTG GNTCTGACTC  
 AGGCGACGTA CTGTAAGACG ATATTACTTT AATCATCTC ACATCAGTAT TTATGGAATA GCCACAGGIG CCTCATCCTT  
 TAGTAGGAGT TAATTATACA TTTNCTGGCC GAGTAAACAT NTCCGAATGG TATGTATGTA TTT

SEQ ID NO:420: (Length of Sequence = 406 Nucleotides)

TTTAAATATT AAGTTAAGTA TATAACTTGC CCTATGCCAT ATTGCTTTAA TCAGGGGACT GAGCATCACA TTTAGATTTG  
 ATGAGTTGG GAAAAGTTCT CAAACATCCA GACCCATGGA CCTTAAGAAT TACTGCAGAA ATCTCCTTCA ATATAGTCAT  
 AGGGAGCATT AATGCTTTTG TGGTACTAAA CATATTTTIG AGCTTAGATA CAAATCCTTC TTGTCTGAA CTGATAGGGT  
 AGGAATTGTT TAGGTGCTTC AAATCCAGAT CTTTCAGGG TTGCCACCTA AACTCATCTT TATGAGTAAC TCTAGATAAT  
 AATACACTTT GGTATCTTCC AAAGTGCTTA TCTAGGCATG GAAAAGTTCA GTAATTATCA TGAGGNCCTG TTTTLAGGTT  
 AGGTCC

SEQ ID NO:421: (Length of Sequence = 281 Nucleotides)

ATCCAGATTA CTGACTTGTA CACAATGGAC CATATGINCT GTCCAAAATA CACCTACATT AACTGTGTG GAACANGAAC  
 CTGGGCTTTG CAAAAAGAA TTTATGATTA AAATGTAACC CCCCCAAA AAAAATGAAG CTTAGAATTA AAGGTAGCCT  
 TTTACCCAGA TTGTTACCA GNTTGTAATA TTCTAATATG GGTCATTAAAC TGTTCAAAA TAATTCATAT TTGNCCTTAT  
 GGTTTAAGGG CTCCAGATTG AAAAGGTGCT CTGAACCTCT G

SEQ ID NO:422: (Length of Sequence = 220 Nucleotides)

TTTGTATTT TAATAGAGAC GGGGTTTGC CATGTTGGCC AGGCTGGTT TGAACCTCTG ACTTCAGGTG ATCTGCCTGC  
 CTCGGTCTCC CAAAGTGCTG GGATTACAGG CTTAGCACT GTNACTGTCT GCCTGGCTGG CTGGCTGGCT GGCTTCTTT  
 CTTCTNTTT TCINTCTCT TCCTCTCTC TCTCCTTC TTTCTTCTT CTTCTCTCC

SEQ ID NO:423: (Length of Sequence = 391 Nucleotides)

CTGTCTCTTA TCTGGGCAAG CTTTAGACAT ACTAGCTTGG TTGGAACTG ATATTAAAAG CCTAAAACAT GTAACCTTNC  
 TIATCAGGTT ACTATCATGG GGAATAAAG ATTCTGGTT TTTTGTATGT NCCATAACTA TACTTTAGTA AGCCCTGATA  
 TACGGTGTTA ATTTTCCINC AGTGAAGGAA ACATGAAGAT ATATTTATGT GCACACATAC ATATATATGT ATATATAACG  
 TATATTCAA CATGCACTCA GAGGAAGTTA GGGAGAGAAG TTCTAGCTA AACATGATCT TGTGAAATTC TTCCATATGT  
 GGAAAGTCG TCAGTTCATC TGACATAGAG CAATACCATA CATATATACA CACAGGGTGC TATGGTATAC A

SEQ ID NO:424: (Length of Sequence = 379 Nucleotides)

TGGGAGCCT GAGGCATGAG AATCGCTGA GCCCTGNGG TGGAGGTGC AGTGAGCTGA GACCCCGTCA CTGAACCTCA  
 GCGTGGGTGA CAGAGCAAGA CTCTGTATCA AAAAAACAA CAACANACA AACAAAAAG CCTATTATAA AACAAATAGGA  
 AATGCTGAAG TCTAGTGCAC CAAGACATAC TGAATTTCAA ACTAAATAA TTAAATTAT CATGTACATT CCACTACATG  
 TCAAAACAGG AAAANCCATA GTATTATAGT TGATATGAAA TGANGATTAC ATACANCAGT AATACAGAGN AAACATGAAG  
 CTGCTTATAT TTATTTGGN ATAAGGNCAN CAGGGGCCAA TGATTTTCAC TGCAGATGT

SEQ ID NO:425: (Length of Sequence = 448 Nucleotides)

TCCACAGGGC GGCTGGGGT CTGAGATGG GCGCTGGGCC CACGGGACGC AGATGGGGCC ACGCTCTGCC CGTGGCTGGC  
 CCACGTTCTT GGTCTGCACT GCTGCTCCTT CCCCAGCAC CCTGGGSCAC AGAGGGCAGG GTCACAGCTG GGAAGAGGTG  
 GGGGGTAGAA ACCAAGGCTG GCAGAAGTNT AGCCGGGCTC CCTGATAAAT GCTGGAGGAC CCCAGGGCAC CTGCACCTAC  
 TGTACCTCT CTGAGAGCAT TTGTATGATC TCATGTCTCA GCTCTNNGAG GCTGGAGGTC CCAGAAACC AAGGTATGGG  
 TAAGATTGAG TCTCTGGGTG AGTACCCAGT TNCCTGGCTC TAGATGGGCG CTTTCTCCTT GTGTGCTCT AAATGATTGG  
 ATGAGGCCAG GGTGCTCTCT TGGAGTCCTT TCTGTAAGGG CAACTGAT

SEQ ID NO:426: (Length of Sequence = 417 Nucleotides)

GCGTGNTCA TCGCTGTCTT TTCTCTCTG TCAGAGTCAG TGACACTGAC ATTAAGGTCA TCGAATATCA ACCAGGTCTT  
 GAGGACCTTG GTGTGTTTCC TCCTCTCTA GTCTCCAGAC CCCAGCCTGT TCATTCTCTGA GCTTCTCTG GCACCCCTTC  
 CTTGGGGCCA AGCCAAGTAA GAAATCAGCA GGCCCAAGGT GTGCTTGGG AGGCCGGGC AGTGCCAGG GCAGTCTCTA  
 TACCATCTTC CCACTGGCTT CCTCTCTGCC TGCTCTTAGC CGCCACACAT ATCTCAGCTG TCGAATCCGA TTAGGNTTC  
 TGNCCAGTGA GCCAGACAAG GAGGCCACTN GGCAGGGGAG AGAGAGACAA GGACGCCAAG CAGGGATTGG CAGAAGGAAG  
 GTGGAGACAT GGCTCAA

SEQ ID NO:427: (Length of Sequence = 317 Nucleotides)

AACCTGTCT CTACTAAAA TACAAAAAT TAGCTGGGCG TGGTGGTGG CGCTGTAGT CCCAGCTACT CGGGAGGCTG  
 AGGCAGGAGA ATGGTGTGAA CCCAGGAGGC GGANTTGAG TGAGCCGAGA TAGTGCTCT GCACTCCAGC CTGGGTGACA  
 GAGCGAGACT CGTCTCAA AAAAAGGGCT GATAATGATA AACAGTGAGC ACTCCGGTCC TTTTCTTAC GTTTCTCTT  
 TTTCTCTCT CTCCACCCA CAAGTTTTCG TTTTAAACCA AGGTGTCTCT GCTTGATGGA AATTACATG CTAGTCT

SEQ ID NO:428: (Length of Sequence = 296 Nucleotides)

GTAATTACAG TATTINCAAG TAGAGACGGG TTTCTCCATG TTGGTCAGGC TGGTCTCGAA CTCTGACCT CGGGTGATCC  
 GCCTGCCTCG GCGTCCCAA GTACTGGGAT TACAGGTATG AGCCACCGTG CCCAGCCGGT TTTTTTTTTT TTTTGTAT  
 AGCAATGGAA GAATGGCTC GTACACACGN TAGAGTGAA AGTCCAGGC ACCAAGGNTT CCCACCCTAG AAGCAAGCTC  
 AGGGCTTCT CTTCATCTT CCAGGGAGAG CACTGAGAGA TGATGGGGG TTGGCA



SEQ ID NO:429: (Length of Sequence = 422 Nucleotides)

GAGGGTTGGA GACAGGAGAC AGTGGGGTGG GAAATCCAAA TCTCAACTGC TTTTGTACTG TCTCCTGCTC COGAGTGCCC  
 CANAGCCCAT GCAGACCCTC TGCTGTCTAT GATATCCTGT TCAGCCCTCA ACTTCTCTTA CCATCCCTGC AACTGGGGTT  
 CACTGTGAGC CAAACCAGTT TGCTTCTTGT TTTCTAAAAG CAGGCAGCCC TTCAGGACTG TNCATTCAA GGCATTTCCC  
 ACCTCTNTTC TCCACTCATA TCCCTTCCCA AACTGCCCTT CCTCATTTCT CCGTCTCCAG GGAGAGGGAC TNCAGGCTAC  
 CACAGNCAA AATGGTGGTC TTCAGTCCTA CGTAAGNCAA NCTGTGTGAG TGIGTAAGGA CTNAGGGTTG CTCACAAGGG  
 GACACACAGA NGTGGATGCC AG

SEQ ID NO:430: (Length of Sequence = 332 Nucleotides)

CGCGATCAGC ACCCGGGACA GCGCCACCGC CCACGTGCAG GGGNTGGGGT CCGGGCGGGG CTNGCGCCTC GGCGTCTCCC  
 GGNAGTNTCC CGTCCAGCCG TCGAGCAGGG TGCTTGANIN TMTCTGCAGA AAAGACTCTA GGACCCCGCC ACCATGTTC  
 CGGAGCCCCC AACCCGGGG CCTCCATCGC CCGANAOGCC TCCCGACTCC AGTCGCATCA GCCACGGCCC AGTGCCCCC  
 TGGGCCCTGG NCACCATCGT GCTGGTCINA GGCTCCINA TCTTCAGCTG CTGTTTCTGT CTCTACCGGA AGAGCTGTGG  
 GAGGCGGACA GG

SEQ ID NO:431: (Length of Sequence = 413 Nucleotides)

TGTCATTATT TAAGATGGGG GACATCCAAG CACCTGGAAC AAAAAGGACA CTAAGAATGG GAGAAGAATA CACAAAGGGA  
 GGTAGTACAG GGCCAATAAC AGATTTTGG AATTTTCAA ATTTCTCTT GAAGTAATTT TACAGTCAGT AAATGGAAGT  
 GGAAAGAGG AATAGAAGAG CATTTCAATG ATTTTTTTT TCTCTGTAC TTACACATCT CATGACCTCA TGTTCCAGA  
 ACTTAACACT TAGTGGGGT CTAGTAGATA TTTTGGGGT AAAAGATGTT TGCTGTTTTG CATTTTGTTC TGTTTTGTTG  
 GCTAGCCTGT GAATCTAGCA TTGTAOGTGA GAAAGTGCAT TTCAGATTGA AAGCAACTGG GTTTTGGAAA TGAACITCAA  
 TAACATATCC CAG

SEQ ID NO:432: (Length of Sequence = 292 Nucleotides)

TTACCGTGT TAGCCAGGAC GGTCTCGATC TCCTGACCTT GTGATCTGCC CACCTCGGCC TCCCAAAGTG CTGGTATTAC  
 AGGCGTGAGC ACOGCGCCCG GCCACCATTC ACTAATTTTC AAGAAATGTG GAAGTGTCT ATATTNCTT CCCACTCCAT  
 AGCTCCAACA TTGTTGGCTA TTATGAATTT GGCTATTAAAG TGATGCCAAC AATATTTAAT GAAAAAAGA TATAGCAGTA  
 TAGTTGAAGG AGGAAGCTGA AAGAAAACGG TCCATCTGTG AGGAAAAGGC CC

SEQ ID NO:433: (Length of Sequence = 335 Nucleotides)

TTTTTTTCTC AGCAGAGGAT TTTATTGGTG GTCACCTGTG GCACAGGTTA GAGGAGCCGA AGTGCTGINT TTGTGGTGGG  
 GGGGGGACCA CAAACCCCGG CCTGCCCTC TTGCTTACAT AGGCTTCCCG CTTAGAAGCG CANTATGAAC ATGCCGCTAC  
 GGATCOGGTT GTAGTCTGGG AGCTGCTCAA TGGGGCCATA TCCAGCCACT GCTGGGGCAC TGGTCATAGA TGTACTINGA  
 GCAGATCTCA CGTACCACAC TGGCATCCAC CTCCGCAAAT COGGCTTCC CATTCAGCCA GGGGGGNATG CGGGNGGCC  
 ATAGGTCAGG AGGCT

SEQ ID NO:434: (Length of Sequence = 390 Nucleotides)

GTGCTGACT GCTGATGGA GATGACGTGT ACCCATCCTC TAGACAGTCT GTGCTTTTCC TGTCTTTGGA GCTTCCAGTT  
 CCACCCCAT CAGTTTTTTT CTGACCACTC CATCTTGCCCT TATTTCTCTC TCTTCTCTT TGACTGGAAG AGTACTCATC  
 TTTTCTAACA TCTTTTCATA AACTGTTTTG ATTTCACTTA TATTGATTTT NAAGTATAA TGTGCTGGTG TTCTATTTC  
 TCAGTTAGAT CAGAAGGCC CTAAAGACAG GGCTCCATTG GTGTTAACT GCCATCTTCA AGGTCTGGGA CTTGATTTCN

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CTTTTTTINAC CTNCACAACA AGGCACTCCT CTGACACCA GTGCGAATTT CAGTGCCTGT GGGTCAAAGT

SEQ ID NO:435: (Length of Sequence = 427 Nucleotides)

TCACTAAACA GTAGATTTAT TTTATGTAGA TTGTTTTTC TATAAAAATA TATTTATGTG TTCACAGGAA AAAAGTTGAG  
TTGGTATGTG GGGGTGACTT TCAGATACAT AATTAGTTAA AGGTTTGCTT ATGAAGTTAG AAGGCATCIT AGCTTTTATC  
ATTTTCAAAT TTTTCTTCAT AAAAAAGAAC ACCCTGTGAC AAAGATAAGG TAACTGAGAT TATTATTAGC ACTTTAGAGT  
TGAGAGAGTT TGAAATAAAA AGGTTAAGCA ACCTGCCTAA TGTTTATGTA CAAAATCAGT GCTGGAGCCA GGAAGAGAAT  
TTGGATTTTC CCAACCTTG GACAGTTCTC TAGGGACTCA TGCCCAACCA CCATTCTTGA GACTATATAC AATCAATTAC  
ATTAAATGA TATTGACAGT AGACTAG

SEQ ID NO:436: (Length of Sequence = 249 Nucleotides)

TCAATAACC AGGAGGGGGA CAGAAGATGA TGGCAAGGCA GACTGGGCAG TGTTTINTAG ACACAGAACA AAGAATCAGA  
ATTTGAAAAA AGANGAAAAA CAAATCTNCG CAGCTGCAAC TTTAAAGTAT CACCTTTATA GATGGCAGGG ATTTCCATTA  
TGCAAATGGA ATCTAAGATT TCAATGTGNA ATCTTAGAAT GCAGTTTTAC CACTTGCAGT CINGTATTTG TGGTGGCCAT  
GTGGTGAGT

SEQ ID NO:437: (Length of Sequence = 404 Nucleotides)

GTCATTCACC CTAATCCCTC TTCACCTTC ACAGAACTTT CACACTCCAA TGTACTTGCT GTTGTAGAT GTCCTATAA  
ACAGAAAGCT CTGGGAGACA GGTGTCTTGT TATTCTTGCT CTCGTGATA TCTCTGGGCC TATCACAAGT ACTCAAAGCA  
TAGAAGTTCA ATAAATATGT GTTCAATGTA AGAAATGATC AGTGATTCTC AAGCTGCAGT GCGGTCAGGA TAACCTAGAC  
AGCCTGTTAG CACGGNTCAC TGNNNCCAC CCCACAGTT TCAGGTCTGG TCTGGGNTGG GGGCCAATAA TCTGTATTCC  
TAAAGTCCC CAAGCAATGC TGGTGTGTT CGTCCAGGGA CCATGCTTAA AGAACCACCC GGAATAGGAC TGGTGGACAA  
AAGG

SEQ ID NO:438: (Length of Sequence = 337 Nucleotides)

CTGCAACTTA TACCTTCCAT TTACTAAAGT CCCAGTATGT GTCAAAGTAG TTTTCATTCC TCACAGCCAT GTTATGAGCT  
AAATATCACT AACTTTCCCT TTCAAAGGTG AAATAAAGTG AGACTCTCGA AGATTAACTT GCGCAAGGTC ACCTAGCTCG  
TTAGGAGGCA CAGGTGGGAC TTGAACCCAG TTCTTTCTGA ATTCAAACC TCCAAATGT CTGTACATC AAGCTGCTTC  
AATGAGATGC TAGAAATCA GGACAGTGAG CAAGCTGGAG ATAANGGAAG ATATGGAGGA ACACGGGAAG TGTGATCCTC  
ACACACATAC CCTGCAG

SEQ ID NO:439: (Length of Sequence = 380 Nucleotides)

CATCGTGTAT GAAGGTAGCC ATTTTGTACA TGTACCTTG TTA AAAACAA AAGAGCAGCA ACATGTTTAG AGTGGTGCT  
ATAGATAGAA CACTGCTGTT ATGTTTAAGG AAAATTGGGG CGGGGCGAGA AAAGATCAAT ATGACTAGTT AGAAGACTAT  
TAAGGAGAAC TTTGTACATG AATTATGGAT GTAAGAATTA GAAAAAATA GATGATCATG TTCAGAATTT TAGCTTTTTT  
ACAATTGTAG TGGAAAAGAA AACTCCTAGA GTAATGAATC AATGGTATCC TACAAAAGA GAGGTGCCAA AAATACCATG  
AAATATTATA TTA AAAAATT CACACGNATA GGTAGTTATA ATATGTAAAG GCCAGACTTC

SEQ ID NO:440: (Length of Sequence = 335 Nucleotides)

CCCTGAGCTT TTATTGACCA GTGGACTGTG ACTTTTGATG TAATTTTATT TTTGAGAGAG GGTCTTGCTC TGTCACCCAG  
GCTGGAGTGC AATGGGGTGA TCTTGGCTCA CTGCAACCTC CGCCTCAGG GCTCCAGTGA TTCTCTGCC TCAGCCTCCC  
GAGTAGCTGG GACTACAGGT GCACACCACC TTGGCTGGCT AGTTTATGTA ATTTTGTGTA TGTCTGTGGA GACAGGGTTT

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CACCATGTTG CCCAGGCTGG TCTCAAATC CTGAACTCAG GTGATCTACC CGCCTTCCAA AGTACTGGGA TTACAGGCAT  
GAGCCACCAT AATAA

SEQ ID NO:441: (Length of Sequence = 356 Nucleotides)

ACTAATGTG TTTCGTCTC AACCTGCATT TCCAGAGGTG CCTGTTGGTC TGTAATTGGT TCTGGCATGT TTATAGGTAT  
TACAAAACCA AGTCTTATTT TGCATTTTAC AGGATTTAAG ATGAATAAAG TGATGTGGTT GTGCTAGGTT AGAGTTGTAC  
AAATTATACT CCCATCGCGG ATGGTGGCGT CCCAGGCCTA CAACCTGACC TCTGCCCTCA CGCCCATCGT CAOGCGCTCC  
CGGTGCTTCA ACGAGGAGCC CCTGAOGCTG GGGGGCTTTC AGCAGGGNCC CGGCCAACCT CAGTGACGTG GTGCAGCTCA  
TCTTTCGGG TGGGACTCCC AATCCCTTT CCCTTT

SEQ ID NO:442: (Length of Sequence = 371 Nucleotides)

GATGATTTTG TATCTTTTC TATTTATTGA GATAATCAAA TGATTTTGT CCTTCGTCT ATTGATGTGA TGTATTATGA  
TCATGTTTAT TGATTTGCAT ATGGTGAGCC ATCCTGTGAT TCCTGGTATA AATGCCACCT GATCATGGTA TATNATCTTT  
TTNATGTGCT ATTGGATTGG GTTTGCCAGT ATTTTGTGTA GAATTTTTTC ATCTGTGTCT ATTACGGATA TTGGCCTGTA  
GTTTTTTTG CTGTGTTCTT CTTTGGTTTT GATATCAGGA TAATGCTAGC TTTGTAGAAT GAGTNAGGGA GGAGTTATCT  
ACTCTTCAAT TTTTGGGAAC AGTTGCAGAA CTGTTGTGTG TTTTAGAACA G

SEQ ID NO:443: (Length of Sequence = 329 Nucleotides)

TGAATGCTT TATTTTTTN ATTTCCCATC CAGAAACCCC AGTGTGATGG TGGAAGCAGC ATGAAAACAA CATCTCCCCA  
GGCCTCGCAG TAGAGGCGAA GGAACAGAG CTGCCCATGT GCCTGINTCT AAAGACGCCA CCTCAGGTT GATGTACCT  
GTGGGAGACC GGTCCACCT ACAGACACCA GGTGATGGTC CACCAGGCC CAAGCTCCAG CTGCTGAGT CCCCAGACA  
CAGGTCATT AATAGCTTC GTACAAAAC CCAAGGTGT CCTCCAGCT GGTAAAAAT TGGCAATTT CTACTTGGAG  
GTCTGCTGT

SEQ ID NO:444: (Length of Sequence = 358 Nucleotides)

TTTTTTTTTA AGTACATAGG TCTTTATTTA AACACTGATT TTTTTTTTAA ATATATACAC ACAAACCTTA GTTCAGCAAG  
GCTTCATGAT ATACACCAAT TCCAAAATAA AACAATCAAA TGGTCCAGGT GTAGAATGCC AGATTCCTTT TATCATCTGC  
GAGGAAAAGA GAAGCAGGAT GAGGAAGAGT GAGGGAAGGC GGGGACAGGC TCTGCCCAGA NGAGCTGCG CCTCCTGGCA  
CAGCAACGC TCCAGGCTG GGCCCTGTTC ATATCTGGAG TCGAGGGAG ACTCCCATCG GCCGCTTTGG GACTGAAAGG  
CCCAAGGCTG TCACCAGGTC CCGAAGAGA GGGAGGCA

SEQ ID NO:445: (Length of Sequence = 302 Nucleotides)

TCAGAACGGT GAGAAATAAA TTGCTGTTGT TTATAAGTA ACCTGTTTAT GTTATTTTTT TATAGAAGCC TGATCAGAAT  
AAGACAATAT TGGATAGAAT ATTCAGGAAT GTCTTGCTC CAATGTTGGC CCCCCTGTAC TGAGCTCTAA TCTACACTCA  
CCTAAAAAT TATAAAATCA TAATAAACT GAAAAAGTCA AACTCTCAAT TGCATCCAG CACAAATATC ACAGNTGNIT  
ATTTAAAAA TTATGTCAAG GCCCTAAAA GCTAAATCC NCAGNTCTGC TAATATTTCT CT

SEQ ID NO:446: (Length of Sequence = 367 Nucleotides)

ATATATATAT ATACACACAC ACACATACAT ACATACATAC ATATACATAA CCTGTTTGG GTAAGGCCTA TTGACAGAAG  
CCAGATATCT GGTGGAAGT TAGAAGATGG GCAAGGAATT CTTATCTCAG AGTTTCAACA CTGCGACAAT GTGGAGAGAA  
GTCTCCTGGG AAAATGCAGA TGCCCAATAA CTTCCAAAAG AATCAGGGAA GTTGGAGTAT TTTTGAGATT TACAGTGTCT

TTACTTCAGT AAAACAAGCC ACAGCAACAT TATGCTCTGC AGAGTCTTCT GTTCACCTTT GGGATGGAAA AGAGCTGCTT  
CTCCTAGGNN GGCAACTAAG GCCCAGGACC AAAACTCCCA TCTCCTA

SEQ ID NO:447: (Length of Sequence = 295 Nucleotides)

CTGCAAAACC TTCAGCATTT AGCTAAAGTT ATTTCAACAAT TCAATGCTTG TCTTGCACTG TCCTGGTTCAT TTAAAACTG  
GTATCTCTTC AATAGCAAAT AGTATCATAA CAGACCACTA AATTGGAGG GAAAGTGGTT TCTATTGCAG ATGGATGTAA  
TTAAATTTGG TGTAAATCAC AGGTACAGA ATTCTTATCT GGTAAGAATT CTGACITTTT TTTTAAAGAA GAAAAAATAT  
ATCCAGATCT GTATCCACAT GCTATTTTAA TGCTCAGGNC AAAAGAAGC CACTA

SEQ ID NO:448: (Length of Sequence = 233 Nucleotides)

CAGAATCAGC CCAAATGCCC ATCAATCAAC TGTGCATAAA GAAACTGTGA TATATATATA TCATAGAAGT TCAAACAGAA  
AAAATACAAA AAACITAGCA GAGGATTGTA TCCTTTGCCG TTTATTTTGA TGACCATGCC ATCTTCTAAT CCCAGAAAA  
AAACTGGAAA ACAGAATAAA TATAATTTC TGATTATNCT TATGTAACAT AAATGGAATA TATATATATA TAT

SEQ ID NO:449: (Length of Sequence = 341 Nucleotides)

ACTTCCTTCC TCAGGCTCCT GTACCAATCT TCAATTCAC TGGGATGICC TAGTCTAAAA CATTATTTTC ATTTGAAAGG  
AAAAATATCA ATTTCTATCT AAATTGGAGT AAGATTCAAT TCAGATGTGT TTATTTACAA AACATAAGTT TGTTATTTAT  
CTGTGTTTAA TTTGATCCNG GAACATTACA TGTAAAGAAC ATTCCATGTA AAGAACCAGG CAACTTGGCC AGGCATGGTG  
GCTCACACCT GNTAACCCCA GCACITTTGG GAGGGCCAAG GCAGGTGAAT TGGTTGAGAC CAGGNGGTTT AAGACCCAGC  
CTGGGGCAAA TATTGGCGAA A

SEQ ID NO:450: (Length of Sequence = 313 Nucleotides)

TTTTTTTTTT GACACAGTTT CCAGTCCCGG AAACCTTTAG CTAATCTTTA GCATTCCTTC AATGGTGGGA ATGGCAACA  
GATCACCATA GTATTAATAC TCTGTGTAAT TTTATCACTA GAATGGTTAA TTCCCATATC ATAGTAGAGC TGTTGCAGAT  
ATTTTGAAAT CCCATTATAC TCACTGCCAC TTCAAGATTA CTGTAGTTGT TAGAACAGCT GCTAGATCTT ATTACTTAAT  
AAATTAATAA AGTGTGAATA TAACTATATA ACCATTTTNA AAATGTTTTT TGGATAACTT TCAATATAAT TGG

SEQ ID NO:451: (Length of Sequence = 351 Nucleotides)

GGGCGGCTC CTGGGCACCC ACCAGCTCA TTGCGCGAGC GGCTCCCTC CTGGGGTTGA GTGTCTGGG CCTGAGTCTG  
CAGCCTCAGC CATCTGTTCC CCAACTTGAT CTCCCACTGC TAGTTACAAA CAAATCGCCC GGCTGTGCA AACCTCTGG  
GCTCAGTCCC CAGTCCCGCG GGCATCAAT TCATTCTTTC CTAGCCTGTA AGGTTTCTCC TGAAAAATCT ATTGTTAGTC  
TAATATGAAT TTCCTAATAT GTGACTTAAG GCTTTTCTCT TGCTGCTTTT AAAATTTTCT CTTTGTCTT TGACTTTGAC  
AATTTGGCTA TAATGTATGT TGGAGAGGAC C

SEQ ID NO:452: (Length of Sequence = 363 Nucleotides)

GACAAGGGAG AATTCTTGCT TTACCTATGG ACTGGCTTAA GCGGTGTGGC ATCCGAGGAA TGTTTCAAAT GTGTCTGTGT  
TTCTCTTTAC ATTCCTTATT GTACCTCATT GTCAATTCA CTTTGTAAA TTCCACCTAA CATTTAATTA TTTTAAATTT  
CTCCGTCAATG AAGTTATTTT AAGACACTGG AATAAGTGCA GCTTGTTTA TAACAGCATA GGATTATAAA CAACCTAAG  
AGTCAGCAGT GACATTGATG GCACATGCAT ACAATGGAAT ATTCTGTAGC TGTTAAATA ATAANGAAGA TCCTGCTCTG  
TGTATTTGAT ATGGGAAGGC CCCCCAAGGT CTACAGTTAA GGG

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SEQ ID NO:453: (Length of Sequence = 382 Nucleotides)

ATGAGGGAAA AGATGGTGCC ATTGAAGATA TTATCACAGT GCTGAAGACT GTNCCCTTTA CTGCTCGCAC CGCCAAGCGT  
 GGCTCTCGGT TTTNCTGCGA ACCTGTTCTC ACTGAGGAAT ACCATTACTA AACTATTACT CTTTCTCACC TGATGCTCTT  
 AAAAGATCTT AGAAACCAAC CATACAGACG AGCCGATGCG GTGAGGAGAA GCGTCAGGCG GCGCTTTGAT GATCAGAACT  
 TCGGTTCTGT TAATGGTGCC GAAATAACAA TGTGAACCTG AGACTGGCCT GCAATGAATA CAGGGGTGTG CGTGTTTCAGG  
 AGGTTTTCTG TTGCGGTCAC CCATGATGGC GGGCCTNCCC ATTTGGGCCA ACTTTTCCTG GG

SEQ ID NO:454: (Length of Sequence = 391 Nucleotides)

CGTCTGCC TGTTGACTGG CTGGAGAAAT AAGTTAGGGA GAATCTAGAT ATGGTTGAAT TGTCAATGCT GCTCAAAATT  
 TGTTTCTTTG TGACAACAAC AACAACAACA ACAACAACA CAACAACAAC AACAGGTGAA ATTATCTTGA AATACAAAAG  
 AACGTCGTIT GGTCTGAGA GTGAAAAAG GAATCCTTAA CAGCTTCAGC TTGCACCAAG AGGATTTTTT TTTATCAGCT  
 TCCCTTCATA AGAGAGGATG GAGGATTTTG GAAGAGACAG AACCTGGGAG AAATTTTCAGT GAGCTGCCAC TTTACTGGTTT  
 AACCTACTTC CACAGAAGGA ACCTATTATT GTTNTATTG GGAATTCAGT AAATGTGGGC CATGTAAAGG G

SEQ ID NO:455: (Length of Sequence = 282 Nucleotides)

TTGAGTACTC ATTGAGGAC TGCAGTCATA GATTTAAAGT GTAATCAGTC AACTCAGTGG AATTACTTTC TCCATTAAATC  
 TTAAATTGCT TCAGGACTGT TTCAGCCTAA GCCAGTAGCT GGGTTTAAAC AAATTTGAAG ATTTTNTAG GAGAGTTTGG  
 CACGAGGAGA GAGGGGCAAA GCGGTGTAAG GCAGTGTTTA TAACAGTGGC CCATGGAATT GATCATGGGT AAAGAGAAAA  
 CAAGGACATG CGAGGAGGTG ATAAATAGAN CAAAACAAAG CA

SEQ ID NO:456: (Length of Sequence = 340 Nucleotides)

CTAATATG TTTGAGATCT TCAATGAAAT TAGTTACTAA TATTTNGCTT TATTCTTCTC AAAAGATTTA ACATGATAAT  
 TCTGACCTAA TCCAAAAAA AAAAATTCAT GGGCCACTGT TTTGCATGTA ATATGTAAGA NCTCACCTTG ATGTTAAACT  
 CCAACCCCTG GCTGAAACAG GTTAATGATC ATTTGNGTIT ATTTATTTCT ATAAATAGTT TGAAGTTGGC CAGGCCTGGT  
 GCGGTCTCGC TGTGTCTCCC AGGGTTGGAG TTCGGTGGCG CAAATCTCGG CTTCACTGCA AGCTTCCGCC TCCCCGGGGT  
 TCACACCAAT CTTCTGCTT

SEQ ID NO:457: (Length of Sequence = 338 Nucleotides)

ATGAAAAAGT CTCAGAGAT TATCAGTGGG OGGATGACAT TTGCCCTCTG TTGCTATTCT TTGACATTCA TGAGATTTCG  
 CTACAAGGTA CAGCCTCGGA ACTGGCTTCT GTTTGCATGC CACGCAACAA ATGAAGTAGC CCAGCTCATC CAGGGAGGGC  
 GGCTTATCAA ACACGAGATG ACTAAAACGG CATCTGCATA ACAATGGAAA AGGAAGAACA AGGTCTTGAA GGGACAGCAT  
 TGCCAGCTGC TGTGAGTCA CAGATTTTAT TATAAATAGC CTCCTAAGG AAAATACACT GAATGCTATT TTTTACTNAA  
 CCATTCTATT TTTATAGG

SEQ ID NO:458: (Length of Sequence = 370 Nucleotides)

GTTCCTTTT GGAGCTGAAC CAAAGAATGT GCACCTCTT TCTTAGTGC TGTGGTGTCT GCTTATTTTT GTATTGTGTC  
 TTTCCATCCA TCTTCTGTGA TCACAAGGCA TTCTTAAGGT TTCTAGCAC GACTTGCGGA CATCCAGACT CGTGGGGGGC  
 CCACCCATGG CTCGGTAAGC CAGCAGCCA GGGCACTGGC ACTACCATGA GGCATGTCAT TAATTGCTGC ATACAGCTGT  
 TACCCGACGG CGCACACAAG CAGCAGGTCA ACTGCCAAGG GGGCCCCCAT CACGTCACC AGGCGTGCCC CAGGTTGCAA  
 AGGAGGAAAA ACAAATTC TGGTTTCCGT GTGGGACAGT AAAGCAGATG

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SEQ ID NO:459: (Length of Sequence = 339 Nucleotides)

ATTTTCCTAG AACTGAAATC ATCTACGGTT CTCAGAGCTA AACTTCCAAA GCTACAGTCA GCAATTTTTC ATCAGAGCCC  
 AAGGGAGAGG GGCCAGGGTA AAAGAGACGA GACTGTAGAG AGGCATAGAG AGACCACTAG GAAGAGGGTG GGAGAGGGCA  
 CTTATTTCTC TCTGTCTCT CAGTGGGTTA CAAATCAGAT CTGGTGACAA CACTGAGGGG GCCAGGTCAG GGTATGTNGA  
 TGAGAAATGA CACTGGAAGG AACATCAAAG CCCAGCTAC AAAAAGAAAG TCATCAAGCC CCAAATAGAA GGGGGAGCCT  
 CCCAGTGCAC CTCAGAAAT

SEQ ID NO:460: (Length of Sequence = 380 Nucleotides)

GAGCTTTTGC ACTGCAAAAG GAACAGTCAG CAGAATAAAC AGACAGTTAG AAGTACTTCC CTATGTAGAG ACACACTCAA  
 GTGAAAGGGA ACCAGGCTCT ACCACTTGAA ATAAGGAGTA TCAAGGAACT TGTGGACAGC TTTTAAACT ACCACTGGCA  
 ACTAGGTCTT GAGGTGGATA AATGAAGAAA TTTGGGGAAT CTCACACTGG AGATGTTTGA TGTAGGTAAA TGANCTGAGA  
 TTCATTAGGT GTGAAATAAT GAAGTGTATA TATAGTTCTG CATATACATG CCTGGGGAAG GTATAATATT CAGAGGCATA  
 CTATCACTCA ATTTGTATCT GCTGTGGGCC TCAGACAGTA CAGGGGCAGT GTTTCATTG

SEQ ID NO:461: (Length of Sequence = 317 Nucleotides)

GTCATTAGA AGCCTTTATT GGGTATATT CAATTTGACC TCCCACCAA TTAAGCGGGA AAAACAAAA AAATAAGAAA  
 TCCAGTAAA AGAGCCCTC AAGATTTTAT AACTACAA CTAAAGCTGC TAGTTAATAA GGAAATGGCA GAATTTTTCAG  
 AGCTGTATA TACAAAAATT CCTGTAAATT AAGCAGATGT TTTCTCACT GATGACAAAT CTTCCACAC AATGTGAAGT  
 TATGCTACTT GGGATATTG TAGGCAAAAC CATTTTTTTT TTGTACAAA ACAAAAGCAA GGGACCNTGG AAAAAA

SEQ ID NO:462: (Length of Sequence = 261 Nucleotides)

AAAAAGGCCA TAAATCCTIN CCTCGTGA GCTTACCTTC TAATAAGGAG AGACAGAGGG TNAGAAACAA ACAACAAAA  
 ATATGTINAGT TAACACAGAG TGTGGAGGG TGTACGGTGC TATGGGAGAA ACGTGGAGCA TGTCAAGGNG AGAGCAGGCA  
 AGAGGGCATT CTGGAAGGC CTAGGANGAT GGTGACATTT TACCTTCATA TCCACCAACC CCCAGCACAA AGCATTTTCC  
 AGAGGNAGNC AGAGGAGGGC A

SEQ ID NO:463: (Length of Sequence = 387 Nucleotides)

ATACAAGTAC ATCCAGGAGC TATGGAGAAA GAAGCAGTCT GATGTCATGC GCTTTCTTCT GAGGGTCCGC TGCTGGCAGT  
 ACCGCCAGCT CTCTGCTCTC CACAGGGCTC CCCGCCAC CCGCCTGAT AAAGCGCGCC GACTGGGCTA CAAGGCCAAG  
 CAAGGTTACG TTATATATAG GATTCGTGTT CGCGTGGTG GCCGAAAACG CCCAGTTCCT AAGGGTGCAA CTTACGGCAA  
 GCCTGTCCAT CATGGTGTTA ACCAGCTAAA GTTGTCTCGA AGCCTTCAGT CCGTTCAGA GGAGCGAGCT GGACGNCCT  
 GTGGGGCTCT TGAGAGTCCT GAATTCCTAC TNGGGTTTGG TGAAGATTTC ACATACAAAT TTTTGA

SEQ ID NO:464: (Length of Sequence = 397 Nucleotides)

GTTAGCCGTG GGCTGTGGC GTCCCTGAA CGTACCAGGT ATTGTGGCTC CATTTGGCTGA GGATGCTTCT CCAGCGAAGG  
 AGGCAGGGAG CCGGGGAAGT GGGTGGGGT CGGACACCG ACAGCAGCTG CCAGACCAGC CATGCTGCGC TCAGCTCCCT  
 CAGGCTGTCA CTCTTAATCA TCATGTCAT ATCTCTGGG CGTGTGAGT ACCATCAACG ACGTGTCCCC CAAGCTGCAG  
 AGGACGCAAA TCCAGCTCTC CAAGAGGCTC TGTGGCCCT CTCCACATGG GCTTINAGGT CAAGGGTTGG GGGCAGTTT  
 GGACCGNCCT TCCTGNCCT TINGAAGAAG ATCTCCAAN GTNCCGGCT TCAGCTTCTT CCGGGCCTCT TTTGGCA

SEQ ID NO:465: (Length of Sequence = 320 Nucleotides)

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GACGACATTT ATTCCTTTTC CAAATGTTAC AGTAAAACCA GGTGGAAGAG AATGGTTTTA GCAGTTAGAA AAAAAAAAAA  
 AGTACAAATC TGGGGTTTGG CCATTAAAAG TTATTTACAA CAGTGGGAGA AAAAAAGNCA AGAAGTTGTT TCACATTACA  
 GACCTCCCCC CACCCCAAAG CCTAATACTT GCTTACCAAG TCAAAAAGA GACACAGTTG ATTCACAGGC TGGAGGTTTG  
 AACTTGAGTA AGACATTTAT AAAAACCTAG ACGGGGCAGT GTCCINCCCA GCCCAGGTGC CACTTAGGCC AGCACAAGGG

SEQ ID NO:466: (Length of Sequence = 352 Nucleotides)

CATTGTATTT CCCTTCTTCA AATTAATTAC CTACCAAAAA ATGGAAGAAG ATTTTACATG CACTTTAAAA TAGTAAAATG  
 GAAAGTGAAT TTTTAAAATA TATGCATTAA AAGTTTACTT TAATTTCCAG TGGGACTTCC TTTATGAAAT TTTCCATAAC  
 CTCTTCTGG AGTATTACAA GATCTCCAAC ATCTCATAAA CTAATTGTGA TATTAGTGA ACCATAAGCA AATGTATATT  
 TTTAGTGGAA ATAGATTATG AATGAAAGCC AAGCACCTTA CTTTAAAGCC AAAATATGAG ATTTTCCATT AAAAACCATT  
 GGTCCATAAT AGGGAGGGGG GTTTTTTAAT TT

SEQ ID NO:467: (Length of Sequence = 352 Nucleotides)

TGAAAGGCAA AAAATAAATA AATAAAAATA AATACCATTT GCAGAGACAG AGAAACCATC AGAAGAAGAC AAGCAAGGTT  
 GTTTGAATTA CTACGCTAG AATTTAGAAT AACTACTATG ATTTAAACGA AAAAGGCTTT AATGGATAAA ATAGATAGCT  
 CCTAATAACA GATAGTAATA ACATATGGGT AATGTGAGCA GAGAGATGGA AATCTTAGAN CAACAACAGC AACCAACGCA  
 AAGCGTTAGG GATCAAAAAC ACTGTAAACA AAATTAAGAN TCCTTTTAT GGGCTTNTTA ATAGNCTNGG ATACAGGTAA  
 GTAAAGAATC CCGTGTCTTT AAGGAGCCAT CA

SEQ ID NO:468: (Length of Sequence = 336 Nucleotides)

TGACATCTGC ATCTTACATT ATTAAATGCA AAGGAATATC AAAGACTCCT CTGCTAGAAC CATTTTTATT CATAAAGTCA  
 CATTATCATT GTAGAAGTCT TGTA AAAATG CTACCTGAAA TGAATTATGT CCGTCTTCCC ATCTGGCTTA CAAATTCTT  
 GAGGAAGCAT CTGCTCTGTA GCTCTTTATC TTTCTATTTC TACTACAGG GACAATGTAT ATGGAAAGAT AAATGTGTGT  
 AGGTGTATAA ATCTCAATA AATATTGCT GAATTAGATT GTACAGTTGT TATCTTTTAA GNTTAACTCA TCCTGAGGTA  
 CATTTTATTA TTGGGC

SEQ ID NO:469: (Length of Sequence = 156 Nucleotides)

GACCGATGTA GAATTCGTGC TGGAGACGTT CTCCCCTTCA ATTCAATGGG AAGGNTCTTT TCTGGCATGA NCTCTCCGAT  
 GTCTAATGAG CTCTGAGCAC CATCCATAAG CTTTNNCACA TTCITTANAT ATAAAAGGTT TCTCTCCACT GTGAAT

SEQ ID NO:470: (Length of Sequence = 350 Nucleotides)

TTCTCATGTC TGAATTTTAC ACGCACAGT CTGAAATGTG AAGGTTTCTT AATGTTGGTT TTATGGTTTCG TGTAAGATTT  
 TTGGGAAATG AAGGGCTCTT CATTAGGATA AAATGGTCTT AACTTCCCAG AGAAGAAATT CCTGACAACG TGGCTGAAGT  
 TAGATACAAA TGTTAATATA GAAGANTGCT TTTATTTGAA TTTCTAGCAA ATGGTTTTCA ACTACTTTAA ATATGACCNA  
 CTTGAAAGTA TTATCCINT TTTAAACTA CTTTINATGT ATAGATCTAA GGTCTGCTTG AAGCTAGTAG GTTAAAGTGT  
 TTGAGAAATA AAGCAAGAT TTTTNCNTTA

SEQ ID NO:471: (Length of Sequence = 270 Nucleotides)

GGAGCAGGGC TGGGAGTCAG TGGGAGATTG GGAGTCCAAG TCTGGACATG TTACATATGC TATGTCTATT ACAGATCTGA  
 GTATAAATGT GAAGTGGAGT TTTACCACGT GATTCTGAAG TTCAGAGAAG AGGTACAGGT TAGAGATAAA GATTINGGAG  
 TCACAAATAT AAAGATGTAT GACTTINATGA GATTACCAAG GAAGTGGAGA TTAATAGCAA AAAGAAAAGT TTCAAGCTTC  
 AAGCCCCGAA GCATTCTAAT GTTTACAGCT

SEQ ID NO:473: (Length of Sequence = 345 Nucleotides)

TTTATGTAG TTCAAATACA TAAACTGAAC ATTCAAACAT CTTAAAATTA AACTTTAGCA ACAAAGTTTA ACATTCAAAC  
AGGAGTATAG TTTACAAGAA ACACCCAGAA AGGTAATTG TTGTCTAATC CAGAATATTG ATAAAGATCA CTTAATGGTG  
AATAAAATAT GTTTAACCAG TGGTCTATT CTGGCCAACA TGTTAGTTAT GACCGTGGTT CCATACCTGA GAAGAAATTA  
CTACATAAAT CTCTCTTAG GCTAAACAAC ANGACTCGGT CTATAATTCA GAGGGGNTAA TCAAAGCAG TAAGGGTACC  
AAAATAAAAC TAATCTGATC TTTAG

SEQ ID NO:474: (Length of Sequence = 433 Nucleotides)

CAGAATTAGA GCTGTACCCC AAGGGGAAT TCTGTCTAG GAGACAGTGA GTNCTAAGTA CACTCTGGAC AAGCACCAGA  
CACAGAAGCT GCCTCAGTTT GTGCTCCCC TGCAAAGCAG AGCCTGAGAC AAGGATTTGG GTACAAGGAG TTTCACTCAA  
TATTATATTT CCAAGATGCA CCCATGCTTT ATATGGCTAT AGTGCATCCA TTTTACTGCT TTATACTTTC CATTAGGTGA  
CTATATTAGT ATATATTAT AATTCCTAGG TCTTTTGT CTCTTATTG TTAATAATTA TAAACTCCAA GCCCATTGTG  
GTAGATTGCT ATTTCTCAGA GATATTTTCT GCTCCTTCT GGGGACAAT AATACTNITC TCCCATCAAT GGCAGATGTA  
GGGCTTGINA CATTTTCTGG TCAATGGAAT GAG

SEQ ID NO:475: (Length of Sequence = 427 Nucleotides)

GATATGGTTT GTGTGCCAC CCAAATCTCA TCTAGAAGTG TAGTTTCCAT AATCCCCACG TCGTGGANGG GACCTGGTGG  
GAGGTAATCG AACCATGGGG GTGGTTACCT CCATGCTGTC CTTATGATGG TGAGTTCTCA TGAGATCTGA TGGTTTTATA  
AGGGACTTTT CCCCCCTTTG CTCTGCACTT TTCCATGCTG CCACCAGTG AAGAAGGATG TGTGTGCTTC TCCTTCCACC  
ATGATTTAAG TTTCTCNAGG CCTCTCCAGC CATGCTGAAC TGIGAGTCAA TTAAACCTCT TTCTTTTAAA AATTACCCAG  
TCCCAGGNAT GTCTTCATTA GCAACCTCAG AGCAGATTAG NCACAATTCC ACAACTTGA GAATNGGTGT TCAAGTTTCA  
CTCTGGCCTT NAACAACCCA AAATTTA

SEQ ID NO:476: (Length of Sequence = 351 Nucleotides)

CGCCGCTAGG GCGGCNGGGG GTCGGGACGC CGGGCTAGGG GCGCGTCATG TGGCCGCTCA CGGTCCCGCC GNCCTGCTG  
CTGCTGCTGT GCTCAGGCCT GGCCGGACAG ACTCTCTTCC AGAACCAGAG AGAGGGCTGG CAGCTGTACA CCTCAGCCCA  
GGCCCTNAC GGGAAATGCA TCTNACGGC CGTNATCCCA GCGCAGAGTA CCTGCTCTCG AGATGGCAGG AGTCGGGAGC  
TGCGCAACT NATGGAGAAG GTNCAGAACG TCTCCAGTC CATGGAGGTC CTTNAGTINC GGACGTATCG CGACCTCCAG  
TATGTACGG GCATGGAGAC CCTCATTCGG A

SEQ ID NO:477: (Length of Sequence = 333 Nucleotides)

GGTCTCACTC CGTCATCCAA GCTGGAGTGC AGTGGTGCAA TCCTCAACTC ACTGCAACCT CCGCTCCCGG TTTGAGTGAT  
TCTCATGCCT CAGCCTCCCG AGTAGCTGGG ATTACAGSCA TGAGCCACTG TGCCAGCTG GGATATAGAA TCTAAGAGTT  
GATTGTGGAA AACACGTGAA TCTATTGCGC GCATTNTICA TTTAGCAAGA TGGCAGCAGT CCAGCTGTTC TTTGCAGCTG  
GAGATGAAT TTTAAAAATC CCTTCACAC TTAATGTACT GACCGAGACA GAAGTACCTG AAAACAGCT NTGCATGGCA  
GGCCCGGCAA TAG

SEQ ID NO:478: (Length of Sequence = 458 Nucleotides)

ACATGTTAAA ATAAGTAAT ATGAAATAAT CTAAAAAAA AAAAAGTGCA GAACCAAGAC CTCTGTGATA ATCCTATTTA  
AAAAATAGC TACAATTITA GTTAGAATGT TTCCCTTATG AGAAAGCATT TTCTGCATAA CTTTAAATGT ACTGACCTTT  
TCCAAGCTTG CTGAGCTGGC CTTGTCTICA ACTCACTTGG GACACCCTTC CCTGTGCCTC ACCAGGGCCC ACCCCAAGTC  
CCAGTTTCTC TAGGGGGTCT CTCGGGACCC CTGAATCCC TTINCTGATT TGTGCTGCCT TTAGCAGNCG GAATGGGCTG



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GCAGACCACC CTACATNCTC CTGTGTGTGG GGACACTGTC AGGNTGTCTT CCCTGCATTA GNCCTGTCTG AGTTTCCTAC  
CATGTGNCCA GGATGNGTIC CATAGTCGGG GCATNAAGGA CTTAGGATGG GCCCAGTC

SEQ ID NO:479: (Length of Sequence = 360 Nucleotides)

GCATCGTATC TNCITTAAGA AAAACACTTC TTCAAAATCC TACACTATGA AAACTGTCTT TCAGGAATTG TTTATTTGGT  
CCGTTGATCT AGTGAGGCTG AGTTCTTAAA TCTTTCACCC CCAAGTTAAA AATTGGAGCA ACAAACAAA ACTCCAGCAA  
GGCATAAATA AGATATTAAA GTGCATATAT ACAATACCAG AAAAGTTTAG ATTGGGAACA GCAAAAATTT CTAGTGCAAA  
AACTGCTTTT GCCAGCAAAG CTCCCTCTCT GGAATCAAAG GGCTACAGTA AAAGTTAAAA TTGGAACAGG NTTAAGCAAT  
GTCTGTCTTT AGTCACAAGT NAATATATGT GCATGCACCC

SEQ ID NO:480: (Length of Sequence = 322 Nucleotides)

GAAATTAAGT CTAAGCAAAA AGAAAAATAA AATGACGAGT TACTGGGTGC AGCACACCAA CATGGCACAT GTATACATAT  
GTAACAAACC TGCCCATCAT GCACATGTAC CCTAAACTTT AAAGTATAAT AAAAAAAAAA AAANTGAAAA GCTTCAGCCA  
GAGGTCACAA TGCTCACAAC TCATTGACCA AAACATCTCT ATACCCGINT TAGAGCANGG NGCAGGAAAG CAAAACCAT  
CTTCTTACTG TTCACTGGNA TACAAGTTCC ATGAGGGGAT GCAATTININ TCTTGGNCAC TCCTGTGTCC TCAGGGTATA  
GG

SEQ ID NO:481: (Length of Sequence = 369 Nucleotides)

CCTGGGCAAA GCATTGATCT GGTAGCCTTG CTCCAGAAGC CTGTTCTCA CAGTCAAGCC TCAGAAGCCA ACTCCTTTGA  
AACTTCCCAA CAGCAGGGCT TTGGCCAAGC CCTTGINTTC ACAAATTCGC AACACAACAA TCAGATGGCA CCAGGGACTG  
GCAGCTCCAC TGCCGTCAAC TCTGTCTCTC CTCAGAGCCT GTCATCCGTC CTGGGCTCAG GATTTGAGA GCTTGACCA  
CCAAAATGG CAAACATCAC CAGCTCCAG ATTTTGGACC AGTTGAAAGC TCCGAGTTTG GENCAGTTTT ANCAACANCC  
CAAGTACACA GCAGAATAGG TACAAGTCAA CCTACAAC ACTACTTCT

SEQ ID NO:482: (Length of Sequence = 255 Nucleotides)

GAGAGAATCT CGCTCTGTG CCCAGGCTGG AGTGCACTGG CGCAATCCCG GCTCACTGCA ACCTCCGCTT CCGGGTTCA  
AGTGATTCTN CTGCTCGGC CTCCCAGTA GTTGGGATTA CCGGTGCACA CCACCGCACC CGGCTGATTT TTTGTATTTT  
TGGTAGAGAT GGAGTTTCAC CATGGCTGGG CTGGTCTTGA ACTCTGATC TCAGGTGATC TGCCCGCTC AGGCTACCAG  
AGTNCCTGGG TTACA

SEQ ID NO:483: (Length of Sequence = 353 Nucleotides)

CTGGATAATC AGGGCCATGT GCTTTAACAG GATGTAAAGG GGAAGCTCAT GATTAAACAT GGGAAATATG CAGCAAATTG  
CAAGACCTGA GCTTAACGCG ATAATTAGAA CATAATTTIN CACTTCTTCC AGAGCATCAG CCAAGCAAAG GACTGAGAAA  
TCTGCAACCC AATTGTCTTA AAAAGAACT TAGGCTTCAC ATTTGTGACA TAATTTCTTT TAAATGAAT ATAAATTTT  
ATTTTINATA TTTGTAGAGC ATAGGATGAT TGAAATCCAG TTGTGTGTTT ATCTGACCTC CATATCTAAT ATGGCTAGTG  
CCGTTACTAC TCTACAGAAC GCGCAATAAG TCA

SEQ ID NO:484: (Length of Sequence = 371 Nucleotides)

GACCCAGAAA ATGGAGCTAG CTACATTTCT CACACTTACT GTCAATAATTA CATGTTTATA TTCTATTAGT TGTAATTATT  
TTTCACCIAT CTTCTATTGA GAATGTTATA CCTATAGAGC AGATACCATT CCAGTTTTAA TTTTGTGCCC CGACTCCTAG  
TAAGTACGTG ACCTATTACA GGGAACTTAA AACAAACAAA AAGTCTGCTG AGTCTGGGAT GTTTTAAGGA TCGAAGGAAC  
ATGTTGGTCC AATTGCTCTT CACAGAGGGT TACCTCTGCT TTTCTACOGA ATGTGGAATT GCTCCCATGT GGATTTTNA  
GGAATTCCAG TCTACCCTCA GGGGAAGGNC CACATGTAAT GCCAGAGGTC T

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SEQ ID NO:485: (Length of Sequence = 376 Nucleotides)

GGTCCGACGC TGTGTCAAGC TCTGCACCGG CCATGAGTAT GCAGCCAAGA TCATCAACAC CAAGAAGCTG TCAGCCAGAG  
ATCACCAGAA GCTGGAGAGA GAGGCTCGGN TCTGCCGCCT TCTGAAGCAT TCCAACATCG TCGTCTCCA CGACAGCATC  
TCCGAGGAGG GCTTCCACTA CCTGGTCTTC GATCTGGTCA CTGGTGGGGA GCTCTTTGAA GACATTGTGG CGAGAGAGTA  
CTACAGCGAG GCTGATGCCA GTCAGTGTAT CCAGCAGATC CTGGGAGGCC GTTCTCCATT GTAACCAAAT GGGGGTCTGTC  
CACAGAGACC TCAAGCCGGA GAACCTGCTT CTNGCCAGCA AAGTNCAAAG GGGCTT

SEQ ID NO:486: (Length of Sequence = 396 Nucleotides)

TIGATATTG TGTCTAATTC CAGCTACTTT GAAAGCTAAG GCAAGGGGAT TACTGTATTA ATAAATTCTC ATGCTGTAA  
TAAAGACATA ACCAAGACTG GATAATTCAT AATGAAAAAG GTTAATGGCC TCACAGTTTC ACATGGCTGG GGAGGTCTCA  
CAATTATTGG AGCAAACAAG AGACTTTGTT CAGGGGAATC TCCACTTATA AAACCATCAG ATCAGTGAG ACTTTTTTGC  
TATCATGAGA ACAGCATGGG AAAATCCAC CCCCATGATT CAATTACCTC CCACAGGGTC CCTCCAGGG ACATGTGGAG  
ATTATTACAA TTCAAGATGA GATTTGGTTG GGGACAGAGA GGCCAAACCA TATCAATTAC TTAAGGCTAG GGGTTT

SEQ ID NO:487: (Length of Sequence = 375 Nucleotides)

TGATTAAAT AATAGAGTTT AGTAATATGG ATGAATATAA GATAAATATT TAAAAAGCAG TTGTATTTTT ATAGCCCAGC  
AAGATAAAGT TCAAAATATGT ATTTTTTATA AAGATGGATT TACAATAACA TCAAAAATTA AAATGCACCT TGAAATAATA  
AAGACATGTA AACCCTTTTA TGANGACAGA TTTTTTAANG CATTTTTAAA AATNCTTTTT CATTGACAAA TAATTATCCN  
TATTINTGGG GTACACAGTA ATGTTTCAAT ACATATAATA AATAGTGATC AGATCAGAAT AATCAGCTTA TCCATCATTT  
CAAACACTTA TCATTTCTINT GTGTTAGGGG CCATTCAACA TCCTGCTTCT GGCTA

SEQ ID NO:488: (Length of Sequence = 323 Nucleotides)

CACATCATTG ATGATTGNT TAACAGTATA TAAACAAGGG CCATGGTTT TTTTACTAAA GTAGGTCTGA AAGATCAATA  
TAAATACTAA TGGGGGCAGG GAGGAGTGT TTATACCCCA AACTCCAATA TTCCAGCTCT GTGTCCTGTC CTATTATTAT  
AATTGTGAAA AATCTTAACG ACGCAGTGAT TCGAGTTTTC GTAACFTCAA TGATGTGTTA GAGGACAATG CATCTTGGTT  
TGAAGAATTT GCTGTATCCG AAGGCCGGA AAGTACTCGA CCACGATGAT TAAATACATA AAAGGATGGG TGATTCCTTA  
CCG

SEQ ID NO:489: (Length of Sequence = 326 Nucleotides)

TTACCTTTTA CTCGATCAT AATCTCCAC CTGTCTAAGA GGTTATTTAT TCCTTATTTA GAGGGCCTCT ATTGCCATGT  
GCCGTGAATT ATTATATGCT CATCACTTTA TGAAGAATAA AATTGTCTT TCCTGCTTTA AAGTTACATT CGTCTTCCG  
CTCAAATCCT GATCTGGTCC ATTAAAGAGT GTTCGCAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCCC CCCAAGATT  
GCCCAACAC TGAACACAG ACAAACTA TTTTATTTAA ATAAGGNGAC AGCTTTCTAA AAGTATACAT TCCTCTAATA  
AAAATA

SEQ ID NO:490: (Length of Sequence = 186 Nucleotides)

CTCAGATCCA TCAAGATGTG AAACTCGCAA GTTGGTGCA GAGAAGGTAC ATGGGTTTCC TTCTTTCTC ATCTGTATTC  
CCTTTTCTGC AATTATTTTC TTGCCACAT ACTAGCCAGC AAACCAGGCA CCTTTGCCAG AGCCATTAAG CTACAAAAAT  
ACTTAATATT TTAATTGAA CTCTGC

SEQ ID NO:491: (Length of Sequence = 347 Nucleotides)

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CCTGTACTTG TCGTCCCTCA TTCACTTAAT TATGATACCT GCCTGGCATC TTGCAGGTTT CTGATGCTGT TACCCCAGTA  
TAGACCAAGT GCAGACAGAA TTTCATTTCT GCTTTATTAA GGCACAGTCT TGAGAAACCC ATTGGCTTCA CACACAATTA  
ATTAATTTNT GGCAACAAGC TACTATATTG GCTTGCACTG CACTTTCACC TCCTGCGGCA TTAGTTTNTCT CTAATATTTA  
TAAAAGAAGG ACATGACTTT CTAAGGTTCC TTGCAGTAAT TATGCACTTC TATTCTAATA GATGCTTAAG CATAAAACCC  
ATTTTAATAC TGTCCCAAGG ATCCAGG

SEQ ID NO:492: (Length of Sequence = 320 Nucleotides)

GAATTTGGNT CCAAAGTTTG GACATTGCAAT TTCATTAAATA CGTCCCTTAA GTTATTTTFA ATCTGTATTT TCCTCTCTCC  
TTTTGTGTTT TTTGTAATCT CTTTTTGCTG TTGTTTTGCG TTAAAGAAAC CATGTTTTTT TCGTCTGTG AGTGGCTCTC  
GTTCAAGATT TTAATGATTT CATCTGCTGG TATCAATTTAG CATGTTGCTC TGTCCGCGT AGTACTTTAA ACTAGACGTT  
AGATCTAGAG ATGTGATCTA CTTGGGTAGG ACTTTGTCAA GAATACTTGT AAGTAGGTAT TTAGGTACCA GGGGNCACAT

SEQ ID NO:493: (Length of Sequence = 339 Nucleotides)

TGCCAAGTTT GCTGGAACAT TATCAGATGG CTTAGGGAAG ACGATGGACA ATCGGCATCA GTCAGAGCGG GAGTACATCA  
GGTACCATGC AGCCACAAGT GGTGAACACC TTGTAGCCGG CATCCATGGC CTGGCTCATG GTATCATTTG TGGACTGACC  
AGTGTATATA CTTGACAGT GGAAGGTGTG AAAACAGAAG GGGGTGTCAG CGGTTTCATA TCTGGCCTTG GAAAAGGGCT  
TGTTGGCACT GTAACCAAGC CANTGGCAGG CGCCCTGGAT TTTCATCAG AAACAGNCCA GCGCGTGAGA GACACAGNCA  
CACTTCAGCG GCCCAGGN

SEQ ID NO:494: (Length of Sequence = 366 Nucleotides)

GTAGGCTTT GGAAAGTAAT TAGGATTAGA TAAATCATC AGGGTGGGGC CACCATAATG GGGCTGGTGG CTTTATAAGA  
GGAAGAGAGA CTTGAGCTGA CAGCATGTN CTTCCTCT TGCTATGTG TGCCCTCAGC CATGTTAGGG CACAGCAAGA  
AGGCCCTCAC CAGATATTGG GGTGGTCTN GACCTCCAC CTTCCAGAAC TGTAAGAAAT AGATTTTTTT ATATATTACC  
CAGTCTATGA TATTCTGTTA CGGNAACAGN AAACAGACTA AGACAAGCTT CTTAAACAAA TTGANAATAG AGTTTTAAGA  
TNCAGACTTT CATTCCTTT AACAGGGGCC AAGAATATCT ATTICA

SEQ ID NO:495: (Length of Sequence = 384 Nucleotides)

CGAGGAAGGC AAGAAGCGCA GGGGTGGGCC CGCTGGCGT CGGTGGCTC CGCTCTGCT CGCAGCCCT GTGGTCAGAG  
CTGGATACAA GATTCAGAC CCTTCNTTG CTGTNACCC GCTCCAGTT GGAGCCACAG ACACCCACCG CCACCCCGGC  
TGGGTCTGN TCCTTTCTG TGCCTTTCCC TCCAGAATGC GGCCTCAGAC CTAGAAGCTC AACCCCTTA TGAGGGCCAC  
GTCTGGGGT AGCTCTGAC CTNCGACCT ATGTCCAAAT TTCACACCA TGGTTTTTCA TTTGACCCGG CCCCTTCTG  
CTCATAATGA CAACNAGCTT CCTTTGAGAG GGATCAGAGN CCAATTGCAC AAGGAGGAGC CGCT

SEQ ID NO:496: (Length of Sequence = 342 Nucleotides)

TACCTTAGTA AATGCAATTT TCGAACAGGC CCCATCTTC AACTGGTATA GCATCTTCCA CACCTGTAG CTTCAAACA  
TCACCTGTTA AATACTGCC CATTCCATGT CATGTATATC TGCCCATTTA TGGGAGCAGT GAGTGGAAAC CTGACAGTGA  
CGGACTTTAA GCTGTACTTC AAAAATGTG AGAGGGACCC GCATTTTATC CTTGATGTT CCCTTGGAGT GATCAGCAGA  
GTGGAGAAGA TTGTGNCAC AGAGCCATGG AGACAATTCC TGTGGTATAG AGATAGTGT CAAGGATATG AGGAACCTGC  
GGCTTGCTTA TAAACAGGA AG

SEQ ID NO:497: (Length of Sequence = 273 Nucleotides)

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GATTTATTAA GTATCCCCGA AAATATAAAC ACAAACCAGT AAAAAACAAA ACCGTAAAAC GTCAGGCCTG GAGCTGCAAT  
 AAGACAGAGA CAGGAGCAGC TCACACGTGG CCTAGGTGGG GAGGACGAGG CCATAAATAC TGCAGGAGGG CGGCAAGGGA  
 GCCCTAGGGC GAGGGGAAAG CAGGGTGTGG GCAGCGAGAT GGNTCCNGGG GTTTAGACAC TGCTGGCTTC GGNTCCGGCC  
 GGCACCANGA CTCTCACTTC CAGCTGCGAG CAG

SEQ ID NO:498: (Length of Sequence = 319 Nucleotides)

ATTCCCCAAA ATAGAGTCTG GACCTCTTAC CGCTACAAAT TCCAGGTCTT CAGGTACAGC CTGAGAGTAT GCAGATATAA  
 TACACCACAG ATGATCTCTT CCTTTTITG TTTTTTTTTT TTTTTTTTTT TTTTGGAGACA GAATCTCATT CTGTCAACCA  
 GGNTGGAGTG CAGTGGGCTG ATCTGGGCTC ANTACTTCTC CCGCCTCCNG GNTTCAAGCA ATTCTCCTGC CTNAGCCTCC  
 CGAGTAGCTG GGNCTACAGG NGCACACCAC CATGCCCATC CAATTTTTGG ATTTTAAGTA TAGTTGGGGT TTCACCATT

SEQ ID NO:499: (Length of Sequence = 408 Nucleotides)

GAGAAATACC TAATGTGAAT GACGAGTTGA TGGGTGCAGC ACACCAACAT GGCACATGTA TACCTATGTA ACAAACCTGC  
 ACATTGTGAC ATGTACTCTA GAACTTAAAG TATAATAATA AAAAAAGAGA ACCTTTAAAA AAAAATAGAC TGCCAGATAG  
 ACTAATAAAT AAAAAAGAGA GGTTGAAATA ATCATAAATG ACTAAGGGGA TGTTACCCCA CAGAACTACA AAAAAACAAAC  
 AAAAAAACCT CAGAGACTAC TAAACACTC CTATGCACAC AAAGTAGAAA ACCTAGAAGA AATGGGTAAA TTTCTGGAAA  
 CATAACNCCA CCGAAGATTG AACCAGGGAG AGATTAAAGC CCTGAACAGA CTAATAATGG NGTTTCAAAA ATTGAATCAG  
 TAATAAAA

SEQ ID NO:500: (Length of Sequence = 474 Nucleotides)

TTTTATTTTT TTCACTGTTA CTGTTTTTNA TCTTTGATTG ATAAAAATGA AAATGCCAAA ATGAGGGTTA GCCTAATTTA  
 AAGTATAAGC GTAGTTAGCA GCTTTTINCTA ATCACTCCTG TCCATTTTAA AAATAATCCT CATAGGAGTA TAAACAGAGG  
 AAGGAGAAAT GGAGGATGGG CTTAAGAGAA AGAGTATTTT ACAAATGTCT GCATAGCAAA TTCAATTCAT CTACCTAGTA  
 GCTCCTTCCG TGTTAACCTA CAGGTGTCTT CCCCTCCAAA AAAAAGCATC TTTTAGGAAG AAACCACCTT AACACTACCT  
 TTAGANGATT GAACTTCCAG GGATAGGTG TTTGAGAGAA TCACCAAAAG CCATTTTTTAA ATGAATTTTT AAATTACGGC  
 TTTCTCATTC CTATATAATAG TGTAGCAGCC ACCTTCCTC TACTATGGAA CTTTTAACCA ATAATCCAAG TCCT

SEQ ID NO:501: (Length of Sequence = 378 Nucleotides)

GTGGTGGCGG GCGCCTGACC TGTGATCCG CCCGCTCAG CCTCCCAAAG TGTGGGGATT ACAGGCGTGA GCACCGCACC  
 CGGCCCTTGT GTACATTTTT ATAAGAGAAT TTTTITAGCT AGGAGTTCAG AATTTTTTAA GTACCATTTG AATGATCTTA  
 ATTTTNCITT CATGACAACA CATTCCAAA TGAATCATGC TTATGTACTA AGAGGGAAAA TGTATTTAAG NTAAGGGTGA  
 GAGACTTAAG TTATAGGTGA CCTTAGAGAC CTAAGGTGAG AGACTTGACA CATGGAAGGA GTAACATTAG GGTCTACCTC  
 TACCTCAATT TAGTTAGCGA TTTACTACAA TTTAGAGCT AACAAAAGTA AAAATAAA

SEQ ID NO:502: (Length of Sequence = 448 Nucleotides)

TTTTGGAGAT GGAGTCTTGC TCTGTTGCCC AGGCTGGAGT TCAATGGCAC AAAGTGGCT CACTGCAACC TCCGCTCCC  
 AGGTTCAAGC AATTTTCTCT CTTAGCCTC CCGAGTAGCT GGAATTACAG GCACACGCCA CCATGCCAG CTAATTTTTG  
 TATTTTAGTA GAGACGGGGG TTTCACCATG TTGGCCAGG TGGTCTCAA CTCTGAACT CAGGTGATCC ACTCCCTCGG  
 CCTCCCAAAG GGTGGGGATT GCAGGCGTGA GCACCACGNC CAGCCATGAT CCTTAACTT GTTTTAAGAG GTATAATAAC  
 TGGAAATCAT GATGCTCTTT AAGGAATACC AATTGGATGT ATTATGATG TATTTAATTC CATCCATATG NAGTAGAAAC  
 AGTTTTCAAT AGCAGAAGGC AATTATATTA TAGCTACACA ATATAAAG

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SEQ ID NO:503: (Length of Sequence = 446 Nucleotides)

CTACAGTACC CATCTCCATT TTCAGAGAGC TCGATGGAA ATTTCTATGA ACTAATTCTC CTGCACATAC TTTGGTACAA  
GTGGGCTACT GGAGCCACCT TCCTTCGTTT AATCAAACAG CATTATTTC A GCTTATTTAA TGAACACTAT CCAAGATACT  
TGGGGGACAG AAATGAAAAG ATGGGGAGAC CTGTCAAACA TATGGTACTA TGCTATGCA AAATAACATT GGAATGTAGA  
TTCACAGTGG AAGGCAGGGC AGGCATGGAA GAATTCCTGAG AATGAGTGTG ACAGCTCCTA CCTGTACAG CTCCTCAAGC  
TCCTGCTGGA AGCGTTCAGT CAGCAAATCT ACTAGCTGGC TGCGGGCAAA AGTCCGCCCG GCTGGAGGAA AGTGAATTCC  
GGGATTTACA GAGCAGGTAG AGGGCATGCG GCCCAGCCCT CAAGCA

SEQ ID NO:504: (Length of Sequence = 248 Nucleotides)

TTGCTCTTCT TTCTTACCAT GGAACGTCC TTCTCAGGGG ATTTTINAGGT CTGGTGTGTT CTGTGTTTCT NAATAGGCAG  
TTTCTCGCTG TCGCTAAGG GCTTATCCAG GNCAATATCC AGAGCCCTGT AGGGGTGTT GGGGTCTTTG TCATCCTCGT  
CGCTGGGCAG AGCATTCTCA GGCATCTCCT CTGTNACGAT GTCCACCTGC TGGGCAAGGG CGATGTCTC GTGCTCTCC  
GTGGGCAA

SEQ ID NO:505: (Length of Sequence = 367 Nucleotides)

GCTATGTTGC CCAGGCTGTT CTCAAACCT TGAGCTCAAG CAGTCTCTC ACCTGTCTCC CAAAGTCTG GGATTACAGG  
CATGAGCGAC TGINCTGGGC TTACTAAAT TTAAAAGATT TGTGTTGAAC CATCTGCTGA TCATGGAGCA GCAGAGAAAT  
TTATTGACAG ATTTTCTAGG GTCATCACTG ATGACAATCT GNTGCCAGAA CAAGCCTGTA ATGCTGATGA AACATCACTG  
TTCGGCATT ATTGCTCCAG AAAGATACTG ACTACAGCTG ATGCAAAGGC CCCTGTAGGC AGTAAGGATG CCAAGGACAG  
AATAACTGTT CTGGAATGTG CTAATAATGC AGCAGGCATT CAATAAG

SEQ ID NO:506: (Length of Sequence = 419 Nucleotides)

ACACCTGGTG ACTTTAGCTA TGCCTATCAA AAGCCTGAGG AAACAACCAG GTCCCCAGAT GAAGAAGATT ATGACTATGA  
GTCTTATGAG AAGACCACCC GGACCTCAGA TGTGGGTGGC TATTACTATG AGAAGATAGA GAGAACCACA AAATCTCCAA  
GTGACAGTGG CTACTCCTAT GAGACCATTG GGAAACTAC CAAGACCCCT GAAGATGGTG ACTATTCCTA TGAAATTATT  
GAGAAGACCA CACGGACCCC TGAAGAGGGT GGGTACTCAT ATGACATAAG TGAAAAGACC ACCAGCCCCC CCGAAGTGAG  
TGGTTACAGC TATGAAAAGA CTGAGAGGTC TAGAAGGCTT CTGGGATGAC ATCAGCAATG GCTATGGATG GACTCTAAGG  
ATGGTTGGCC ACACAATT

SEQ ID NO:507: (Length of Sequence = 417 Nucleotides)

GAAAACTATT TTAATTAAAA AATATTCTAT TACTTCAATG TCATGTCGTG TGAACGAGGA ACTCAACATG CTTATTINCC  
TTTGGTTCCA AGAAAAACCC AAGTCTAACC AAATGTATGC CACAAGGAAC TGCCAACTGG GTTAAAGCTT GGTATTTTCC  
TGGTTATCAC CCTATTTCCT GGTGTAGGAC CTGGGGTTTA ATAGAGACAT TTACATAAAA AAGGTATTTG GTTAAACAA  
GAAATATGCA TGCNCTTCCT TACCACCTTC CTGGGAAAGA ACTGCTTTTT TTNCTTTCTT TCTGTGAATC TTGTTCAAGA  
CATCCTGTAG TTTAGATATA TGGGCTGCTT CTTTTTACC CTCAAGCTTT TAGGTGACAC TTATAAAGGT GAGCATATCA  
TTCTATAAAA TGGAAGA

SEQ ID NO:508: (Length of Sequence = 308 Nucleotides)

CTGTTTAGAA AAAAAAGTGC AGCTCACTGT CAGCACTCAT TGAATTTTGC ATAAACATGC TTTTGTAGGC TGAAGCAAAT  
CTGACTGATT TTCAATGTGA AAATAAAATA TAAAANCIGT TTTAGAGTT ATTTATTAAC AGAACTAACA TCAGAATTAT  
TTGAATCACC AGAATAATCA ATTCTGGAAA AATCAGATT C ATCAGATTAA TCTTTGGCCA ACAACTGTT C AAGAACAATG  
TTAACATCTG CATGGCAATG CTACATTINC TAGGATTTGA CATTTTCAGC AATTGAGGAA TTACTATA

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SEQ ID NO:509: (Length of Sequence = 370 Nucleotides)

TTTTTGAGAC GGAGTTTCAC TCTGTGTGCC CAGGCTGGAG TGCAATGGCA TGATCTGGC TCACCGCAAC CTCGGCTCC  
 CGGGTTCAAG CGATTCTCCT GCCTCAGCCT CCCAAGTAGC TGGGATTACA GGCACGCGCC ACCACGCGCTG GCTGATTITN  
 TATTTTTAGT AGACACGGGT TTTCACCATG TTGGTCAGGC TGGTCTCAAA CTCGCGACCT CAAGTAGTCT GCCTGCCTCA  
 ACCTCCCAAA GTGCTGGGAT TACAGGCGTG AGCACTTGGC CTTGGCCGTG ACTGATTTTT TTTCATGTAG AATTGTCAAC  
 ACGAGAGATC ACAAGTGGAG CACTTTGAAA GACCGTCGGT TGTGTGCACG

SEQ ID NO:510: (Length of Sequence = 446 Nucleotides)

TCTTTCTCT TACTTTCTT CCTTCCCTCC TTTCATATGA GAGACTCTAT ATGGAAAAGG AAGCTGAAGT GGCTGCACA  
 CGATATAGAA AAGCCATATT ACTTTCCTAA GACTGGTAAT CCGGCAATAC CTAATGCAGC ACATGGCTAG AGACTCCACA  
 TTTGCCAAC TTCTCTGCTC ATCATTTGCC ACTGTTCTGT AAATTTCCCA GTCCCTCAC AGAAAGCACA TGGCACCATT  
 TAAATGGCT GCTCACTCTC TAAGGGAGGT CTCACAGGCT GGTAGTGAGC CCTGTCCCA TAGTGAAGTT CTCACAAAT  
 GGGGAGACTT CTCCAGGAG GAGGGGAGGC CTGGAGATGG GCATGCAGTG GGCAATGTCA GCTGCCCTCC AGGTTCTTGG  
 TTGCCCTTTT TCCGCCCTGG GTCAGTATAC AAGCTTTCCG GGGACA

SEQ ID NO:511: (Length of Sequence = 354 Nucleotides)

AATACCAAC TGAACAAACC TGTCTCTTC TGGTTAAAC AAAAAAAAAA AAACAAAAC AAACAAACA AAAAAATCAC  
 ACAGTTTAAT AAAGANGCAA CTCTTCTT TTAGGNGCAA GGACTACCAA TCTAATTCCT ATCTATTGAG CCCCCAAAG  
 CTCCCTTCAG AGTCTTCTT CTCTTTATCA ACAGAAAAGT CTAGAATGAN TATTCACAGT TTTCTAAGAA AACCGAAAG  
 CCTTTAAGCA GCATTAGCTG GNCATATTC TGTCTCTAT AGTTACCATA GATGAGTACA GCTTTTACT AGGGGGCTGG  
 GAGTTCAGAC TCACAGCAGA GACTNCTGG GTAG

SEQ ID NO:512: (Length of Sequence = 374 Nucleotides)

CATGTATATT AAAAAAAGT TCCTGTACCA AAGTTCTTAT TAGACTTTAT TTTTGTITTT TTAATTTTTA AAATTTTTTT  
 TGTITTTTATT TTTATTTTTT AAATTNCTC TCCTCGTGGT GACTGTCTAT TGATTGTCTC AGTTTCTGGA CCAACAAAC  
 AACTAATAA TTTTAAATCT GAAACAGTGA TTGTCCCTTT NGGCTCATGT ATGTACAGG TGATCAGAAG TGGTACCTGT  
 TAGCAAAAGT GTCACGATGC TGCACCTTA CCGAACTGA TACCCACGAA CTACGGAATC TAAACAGACT ACACCTGTG  
 ACTGCGTATT ACTGTCCACA ATGGGGATCT CCAAGACAA AAGAGGTATG GAAA

SEQ ID NO:513: (Length of Sequence = 463 Nucleotides)

ATCAGCAGAT TTNCTCTGG TGAATGTCTA ATCAGTGTA TTCCATAGG CTATACTTAC CTTTGGGGG CTACTTGCCA  
 ATNATGTTTG GTCAGTATCC TTGCAACAA CAGAGTGACA GATTCTAAAA ATGACTTTGC AGGCCAGTAC TAAGAAAGAC  
 ACCAAGGTTT ATGGGCTTGC AAATAAAAAG TCCATAACTT CCTGCCCTA CTTACCAAG TGAAATCGAG TTCTCACAC  
 TTCTGCACAC AGCTCTTTCA GGATCTTCCC TTCCCTCAA GGCTGTCTGA TGTTCAGTTT AATTTGATTG TATTTGTATA  
 AAGTCTGAG TGTGAGTCC TCAAGAAAT TTACTTTTCT TCTAANGCCC CCTTGGGACA AGAAAGTGGC AACCAGGCAA  
 ATGATTGATT ACTTATTTGT TTGAGTATCA CTTTGTGATT GTCCAGGGC TGTATTACAC ATA

SEQ ID NO:514: (Length of Sequence = 396 Nucleotides)

CCAACCCAGA AACGTTTCC TGGCTCTCTA CTAACAGTAA AATGTGCTGA GCCCAAATTT TCTGCTCTAA CATGGGTCCC  
 ACGGACCTAT CAGTCTGCTC TGGGGTGCTG ACCTGCTGGG TCCTGAGCAG GGTCTTTCCC TAAGCATCAC TGTGGGTTTG  
 GAGACAGCTG TAATGTGTGC AGCTGTGAGC AGAAAGTACA ATGCCACTGG GCTACATATG TCCATATCAT CCACCACCAT

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TTCCCACTGT AAAACCAAAG GCTGCAACTG TGAACAAATG TGGACTTCCT CAAAGGACAA ATGAGGAGAC TGAAGGCTAC  
ATTTCTCTCT TTAGAAGACC ATTAGAGAGT GTCTACAGTT ATACAACAGG TTTCTGCAAG ACCCTGTGGG TAACIT

SEQ ID NO:515: (Length of Sequence = 416 Nucleotides)

ACAAACAAA AAGTAGTAGC ATCTCTGTGA GAGGTACACA GITAGAAAA TGATTCCACA CACGAGTAAA GAGATTTACC  
AGGAAGAGTC TTGTTTTCTA AAAGTTGATA CAACTAGTAG AAAAATACTT GTCAGTGGTA AATAGAGCAG AAGTAGAAAA  
AGCAGTTAAT CTATTAGATC AGATCAGAGT GTAAGGCAGG TATATCAGGC CAAAGGTGAT AAGACAGAGC AGAAATAAAG  
TATTGTTAAT TCATGCATTT NCTGACTCAT TTATTTATAC ATTGATACTG TCACTTATAA ATCAAATCTT ACAGGTCAGG  
TTCTGTGCTA AGCTCAGGGG NTATAAAANG AAATANGTCA CTGCACTCGC CCTCACGGGG GCCCACCAGT ATAAGTGGT  
AGATAGTTCT ATAAAG

SEQ ID NO:516: (Length of Sequence = 368 Nucleotides)

CCCATGGAGC TCGAGAACAT CGTAGOGAAC ACGGTGCTAC TCAAGGCCCG GGAAGGTGGC GGTGGAAATC GCAAAGGCAA  
AAGCAAGAAA TGGCGGCAGA TGCTCCAGTT CCTCACATC AGCCAGTGGC AAGAGCTGCG GCTCAGCCTC GAGCGTGACT  
ATCAGAGCCT GTGCGAGCGG CANCCATTGG GCGCTGCTG TTCCGAGAGT TCINTGCCAC GAGGCCGGAG CTNAGCCGCT  
GCGTCGCCCT CCTGGATGGG GTGGCCGAGT ATGAAGTGAC CCCGGATNAC AAGCGGAAGG CATGTGGGGG GCANTAACCG  
CAGAATTTTC TNAGNCACAN GGGTCCTGAC CTCATCCTG AGGTTCCC

SEQ ID NO:517: (Length of Sequence = 393 Nucleotides)

CCCAGCGCCT GGAGAGCCAG CCTGCGAGGG TGGGCTGGGC GAGCCAACT GCGTTCCTGG TGCAGGGCTT CGGGTCTCCC  
TAACAGACCT TATACCTGA CCGCGGCGCG CCATGGCAGT GTCTCTTTGC TCAGACATCC AGGGACGACC ACATTGCTCC  
AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGCGAATCGT TTCTCTCGCG TGCCCTGTCA GCGCTCATG GTGCCAGAG  
AGGAATTTTA GTGGCAGCAT TCCGGCTGTC ACNCCACGA AATTNCCAGG CCACTCCAAG TCAGAAGGGA CCACCAGGAA  
AAGTCAGGAA GAGAACCACC ATCAAGGTCC CAGGCTCTTT TTTGTGACA AGGACTTAGA GGGGTTTGGG TCT

SEQ ID NO:518: (Length of Sequence = 465 Nucleotides)

CCTTCTCTGC AGATAGAAGA GCCAGAATGG GAAAAGCGAA GATCCATCAA CCTGTCTGAG CTCATTGATG TTTACAGTGA  
TGGTGTGAA CTAATCCAGA TGGTGAAGGC ACCAGATTCC AACTGCAGCA ACCTTCTGAT TACAACCAGA CAAAGCCTTG  
TNTGCTTCG GGGGCAAAAT CTGACACCTT ACTGGGCATT GAGACTTCAA GGCTGTGCA GCAGCCTACT CCTGGATATT  
TCACTGATGA TCAGACATTA GACTTCCTTC TGCAATACA GGATGGAGTT GGGATGAAAA AGATGATGGT TGTGGATGGT  
GACTCTGGGC TCCATGTGTT GGAGTTACCG TGCTCCGTTG TCACATGAAA GAAAACGGCC AGCCACCTCA GCAGTTACTT  
TCAGACCAGA AGTCTGTCTT TCCTCTCTG GGGCCGAAGG CTGTGAGGT TGCATCTCC CAATT

SEQ ID NO:519: (Length of Sequence = 382 Nucleotides)

GGCCGTCGGT AACAGAAAAC TCAGTGCATA CTTTGTGTT GTTAGGTTGT CAATATAGTC TTTCTGTAGG ATGGATAGCA  
TGTTTGAAGAG GTGCCAAACA AGAATTTTGG GGGTTAGTAG TGTGTCTTGT GGAGGGTATT ACAGGACTGT GTAATTATAG  
GACTCTAACT TGACATGGCT TGGCACCCAC TTGCAGCTAG TGGGTACAGG GTACAAAAGA TGTTAGAGAA AAGCTCTACA  
GATTACGTAC TTCTGTGTCT TCGTATGCTC AACACTGTCC TTTGTCTCT CATGAAAGAT GAAGGAAGCA AATTATATGA  
TGTTCTTTCT TTGACCTTCT TTAATCCTCT GATACTTTTT AGATTGCATG ATTTTACTAG GC

SEQ ID NO:520: (Length of Sequence = 304 Nucleotides)

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CCAAGACTGC TGATCTCTAA ACAAGCATCA AAACCCGAAG CTCATTAACA TCAGAGTGAG CTTCAATAAG GTGANCACTA  
 CAATGATGTA CAATTACATC CTAATANTTC ANTGCCCAAG AGCCCTGTAG AACTATTGCA AGGCCCAGGN TTATCACAGT  
 ATGCAAATGC ACTAGGAAAA TCATTACCTA TTTAGTCCCC TTTATTTTGG TGGGTTTAAC ATGAGAAGAG TAATCCATGC  
 TACAAGACGA GATTTTCATTT TACAGCTGTA GTAGCCAAGT GCATAAAAGC TTGANTCTGT CCGA

SEQ ID NO:521: (Length of Sequence = 360 Nucleotides)

TTGAGACGGA GCTTTCCCTG TCACCCATGC TGGAGTGCAG TGGCGCTATC TCAGCTCACT ACAACCTCCA CCTCCCAGGT  
 CCAAGTGATT CTCCCGCCTC AGCCTCCCAA GCAGCTGGGA TTACAGGCGT GAGTCACCTG CCTCAGCCTC CCACAGTGCT  
 GGGATTACAG GTGTGAGCCA CTGCGCCAGG CCTCCCAAGG TGTGGGATT ACAGGCGTGA GCACCGCTCC GGGCCTCCCA  
 CAGTGCTAGG ATTACAGGTG TCAGCTGCTG CACCTGGCAA TTTTGTGATA TTAGGTCCCC TGAAGTCCAA AAAGAGATAT  
 ATGGCTTATT TGGTATAATG AAATCATACA GGAAGGCATT

SEQ ID NO:522: (Length of Sequence = 287 Nucleotides)

TTGAGGAAGT TCTGTGCTG GTGAGGAAAT TCINTTGAGT TCTGTAGGAA TTTTATAGC TTGTTTGCA TTCAGTTCTA  
 TCAACAAGCC AGCAGCAACT CAAAGGGAAG CCTCTNCTG GCATATCAAT CACACAGGCA CATAGGATCA TATAGCATAT  
 AGGATCAGTC CCAAGAAGAA CTATNGGGIN GGGGAGAGGT TTTTCTTCCA CTCTTGGGN TTCAGTGACT TTGAGATGGA  
 CCTCTTTTTT CCNNTGGACA AAATGTCATC ACACCAACAT CTTATG

SEQ ID NO:523: (Length of Sequence = 318 Nucleotides)

CCTGTCTCT ACTAAAAATA CAAAATTAG CCGGGCATGG TGTACAGTGT CTGTNATCCC AGCTACTCGG GAGGCTGAGG  
 CAGAAAAATT GCTTGAACCT GGGAGGCAGA GGTTCAGAC AGCTGAGATC ACTCCATTGC ACTCCAGCCT GGGCAACAAG  
 AGCAAACTT TGTCTACAAG TCCTCCTACG CTGACAGGTC CTCACTCACC TGAATCTTTT ACGCCAGCAG CGTCTCTTCA  
 CTGACGINCT TCTNCATGCC GGAAATAGGA CCTTCCCTTG CCANCGGGCA GTGCTGGCTG CATGCAGTCG TTACTTTT

SEQ ID NO:524: (Length of Sequence = 238 Nucleotides)

ATCTCATTGG AGCCAGGGTT CCAGTTCCTA TGCAAGTCGG CCACAGGAGC CACGGAACCG CAGTAGGATT TCTACTGTTA  
 TACAGCCCTT GAGGCAGAAT GCAGCAGAAG TTGTGGACCT TACCGTTGAT GAAGATGGTA AATTGAAGTA GTAACAGTAG  
 AAAATTATGA AAGGAGTTTG ATAAAAGGAA ATCTCTTAAT ATGCTAGAAA CTCCTCCTGC TFACTGGTAA TATATTAT

SEQ ID NO:525: (Length of Sequence = 168 Nucleotides)

CCAATGAGTG TGGACCCTAA ATTTAAACAG CTAAAGCTAT AGTCTAAGGA CAGTCTCAA TAAATACCTT TGAATTGTCA  
 TATGGTGCCC AGGAGGGTCT TGTGGAAAGG GTTTCATGGT AGTGAAAGAT GTAATANCTC TTTTTCCTT TTAACCCTAA  
 GCCTGTCC

SEQ ID NO:526: (Length of Sequence = 387 Nucleotides)

GGAGGTCACA CGGTGAAACA GACACAGTTA TATACAACAG GGCAGGTTTT TAAAAAGAGT TGCTCTCAGA CGCATTTTTTC  
 CTGCTCCCTA AAAAGCCGAG GAAGATACTG GNTCCACAGA AAGAAAAGGC AATGCCGTAA CATGAGGCCC TCATGGCCGC  
 ACCGTCCAGG GGAAGGGCTG TTA AAAACAC AAGTATTCTT GTGAAATACT TCGATCTGAG CATTAAGGCA GGTCTGCAGG  
 AGATCCGTCC TGGGGACTCG GACAGCAACG CTACCGGCTC CGAGAGGACA GTTAAATGTC GCCTCCCGGC AAGAGGGGCG  
 GAGAGATCAG ACAAGGAGTT GTTCTGAGT TNAAACCTGC TACAACAGCA AACTCCAATA AACTCAA

SEQ ID NO:527: (Length of Sequence = 336 Nucleotides)



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TTTGCACTTT TACATTCCCC TAGTACATCC CTGCTTACTC GGGAGCACAA AGCTTGGTTG TAAGAAATTG TGATTTGGAA  
 GTAGAGAAAA GCAAGGAAGT CCAACCTCAG GAGTGTCTCT GTTACTAAGA GGAGAGTGAG ATCCAGGGTG TGGGAGATGA  
 TCTGAAGGTC TATGGGTGGG GAGTGCCACA GGAAGAAGGG TTCTGGTCGG AGTTAAAGGA GGATATATCT ATATNCTGGG  
 AGATGAGCTG AATTGAGAAC ACATGGAATG GGAACAATTC TCCCCATACT GCGTTTAAAGC CAAATTAGGC TGGCATCCCC  
 CACCACGGCC AACTAA

SEQ ID NO:528: (Length of Sequence = 482 Nucleotides)

TTTTACTCTA GCGTGAGGAG GGGGCCTCCT AAGGAAAGTC ATGCTGGGTA AACTGTGCGA TGTTACAGAG CACATTGAGT  
 CTGTGGTCAT CGTGGTTCIT CTATCTTCAC TGTCACCTGT ATCCTGTAC ACATACTCAG TTCTTAATTG TAAGCTCAAT  
 TTTGGTATTA GCAAAAGCAT CTGTCACTTT TTCTCAATT ACTCACACCT CTCTTGCCT AAATAAAACA AAGAAACAAA  
 GAAAACAAGT GTGGTGTCT TACACGTCTC GGGAGTTCCT CGTCACTGAC TTTATATATA TANAANAAG AATGCACATG  
 CGGGCCACGT TCACAGATAG ACAGATTCAC CCGAAATTGA GGAATGAGGG GCCTTAAAGG CTGCCGANAA NCAAAATGGG  
 GTGGAAATTA GCAANCGTIG TTTTCGGTC AATTNCCAAT TGTGCACTGG CTGCGTTGAG ACAAGNCCAT CTTCCAATTT  
 CC

SEQ ID NO:529: (Length of Sequence = 412 Nucleotides)

CTCTCAGACA GTATCCTCCT CGAAGCAGGA ATCCTAGTAA ATCTCATCTG CGGCATGCGA TTCCTAGTGC AGAGAGGGGA  
 CCTGGGTAT TAGAAAGTCC TTCAATATTT AACTTCACCTG CAGATCGATT AATTAAATGGT GTCCGGAGTC CACAAACAAG  
 GCAAGCAGGT CAAACTAGAA CACGGATTCA AAACCCCTCA GCATATGCCA AGAGAGAGGC TGGGCCTGGG CGTGTGGAGC  
 CAGGCAGTCT CGAATCCTCT CTGTGTTTAG GGAGGGGAAG GAAGAATTCC TTTGGCTACC GGAAGAAAAG GGAGGAGAAG  
 TTTACAAGCA GCCAGACACA GTCTTCAAC GNCACCAAAG CCTCCGTGCG CAAGCTTTG AGCTGGGGGC TTTTCCAGCT  
 TTCCCTCCAT TA

SEQ ID NO:530: (Length of Sequence = 301 Nucleotides)

ACTTTTTAAT AATAGTCATT TAAAGTGGGT GAGATAATAT CTCATGTGG TTTTNAATTG CATTTCTCTG ATGCTTAGTG  
 GTGTGAGCA TTTGTNCATA TAACINCTGG CCATTGTGAT GTCTTTTTTT TTTTTTTTTT TTTTTTTTGA GATGGAGTCT  
 CACTTTGTCA CCCAGGCTGG AGTGCACTGG CGCAATCTTG GCTTACTGCA ACCTCCACTT TCTGGGTICA AGTGATTCTC  
 CTGCCTCAGC CTCCCAAGTA GCTGGGATTA CAGGNGCCA CCACCAGCC CAGCTAATTT T

SEQ ID NO:531: (Length of Sequence = 312 Nucleotides)

CAGATGAGAC CAGGCCTTGA CAGTGGGGG AAGTCTTACC AACCTGCACA GCACATCCAG CAGGNAACT GTGGCTCAGC  
 AGGTGCCAAA TGGAGCCCAT GGGCAGAAGA TGCCACAGC GTTCCAGATG TGTGTGGTCT GAGAGATAAA AGGACACAGA  
 ACAAGATGAC TGTGCAAATA GCCAAGTGGT GGCAGAAGTT CTGCATTTCC AAGAGATGAT CCCTCAATA ATTTGACGAT  
 ACTAGTTGGC CAACATGCTC AGAGAAAACA GNCCTATCCA CATCTGGAGC CTCATTCTCT CTCAGGATCA TT

SEQ ID NO:532: (Length of Sequence = 313 Nucleotides)

GCACAACCTCT CGACCTTGG GAGCAGCCAG GGAGGAGTCA CTGTCCAGC CCCCTGGCT AGGCACAAAG GGGTGGGAGA  
 GACAGCTGGG CCAATATGGT CTATTACGC CTGAAACCCC GCCGAACCAC CCTTAACTCT GCCTTCAGGC ATATCCCCC  
 ACGTCCATGT CCAGGAGCCC CCTACTGTCT CTGGTCATCT GTGGCCCGGG GAATAATGGA GGAGATGGTC TGTCTGTGC  
 TCGACACCTC AAACCTTTTG TGAGTATGTG GGGAGGGGCT GTGGGGGAGG AGGGCGTNAG GGCTCTGGGA TCT

SEQ ID NO:533: (Length of Sequence = 378 Nucleotides)

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GTAATTCCAT GTGGCTGACT GGGTAACAGA TTTGAAGGGT ATCACAGACC TTCATGTTGT AGCTCATCGC AGTGTATTGT  
 TTGTTGCTTG TCTCTGCTC CCGTTGTATT GCCATCCTCA AGGGCAAAGA CTGCATCTTT GTATTCCCAG CTCCTAGGCC  
 TGAGTCAGGC ACATAGTAGG AATTCAGAAA GTATGTTTTG GATGTAACAT TCCTCCTTTT TCCTGGACAA AATGGCCTTT  
 TGTCCGGTGC ATTGTCTTTT CCATAGAGGA GGGGTTGGGG CAGGATTGTN AGATGACTGT GTTTGAATCT TCAGTTAGCT  
 AAGACAAGGA TACGINTTTT CCATGGTGCA AATCTAAAGG GTTCTAGTGA GGTGGTTC

SEQ ID NO:534: (Length of Sequence = 374 Nucleotides)

TTTTTTTTTT GTCCAAGGTT TATCAAATTA ATTGATTTTG GGGGGCAAGA TAAAAATTTT NATTTGATTA ACTTCTCTA  
 TTGGTTTTTG TTTTCAATTT CATTTATTTT TTCTTTTATC TTTATAATGT NCTTACATCT GCTTGGTTTG GGCTGGGCAC  
 AGGGGCTCAT GCCTGTAATC CCAGTACTTT GGGAGGCCAA GGTGGGCAGA TCACTTGAGA CCAGGAGTTT GAGACCAGCC  
 TGGCCAACAT GGCAGAACCC CGTCTCTGCT AGAAATATAG AAATTGGCCA GGTGTGGTGG CCAGCACCTG TGATCCTAGC  
 TACTCGAGAG GCTGAGGCAG GAGAATGGCG TGAACCGGG AGGCGAGAGC TTGC

SEQ ID NO:535: (Length of Sequence = 433 Nucleotides)

TGCGACTGA TTCCAAGTCC CCAGGAGGGC TGTGAATGCT AATAGATATT TGGGGTTTAT CTACATGGAT AAATCAGAAT  
 TGTTAACATT ATTTATAAAG ATAATACTTA CATAATTTN AAATTCACAA AGATTGTTTG GCTTAATGAT TTCTAAATGT  
 ATGCAATATA ACATTAGGCG GCTTTTATTA ATTCTATTTA TGTAAATGGAA AAGCTCAATT CAGCAAAAAA CAGATCTGAT  
 GGGATTTGGT TATTCTCTAC CTGATCAGAA CAAAGCCTTA CTTTACATTC CTGACTACCG ATTGGCTGAG GGATTGTCTA  
 ATAGAATGGA GCTTCTTTT GAGCGGTATC CATGTGTACA AAATTGGGCT GCTTTACCTG TGACCCACGG ATTGCTGGAG  
 GAGCTTGA AA ATGTAGTCAG CCGTTTCTTT TGG

SEQ ID NO:536: (Length of Sequence = 438 Nucleotides)

GATGAATTAA GAGGGAAATT TATAAAGTAA AATCTTTAGC GCTGTGATC AAAGAGTTCC AGGCCGGGCG TGGTGGCTCA  
 TGCCTGTAAT CCCAGCACTT TGGGAGGCTG AGGTGGGCAG ATCAGGAGGT CAGGAGATCA AGACCATCCT AACACGGTGA  
 AACCCCATCT CTAATAAAAA TACAAAAAAT TAGCCGGGCA TGGTGGCAGG TGCTGTAGT CCCAGCTATT TGGGAGGCTG  
 AGGCAGAAGA GGAATTCCTG CAGCCCCGGG GATCCACTAG TTCTAGAGCG GCCGCCACCG CGGTGGAGC TCCAGCTTTT  
 TTGTTCCCTT TAGTGAGGGT TAATTTGAG CTTGGCGTAA ATCATGGGTC ATAGCTGTTT TCCTGTGIGA AATTGTTATC  
 CGNTCACAAT TCCACACAAC ATACGAGCCG GAAAGCAT

SEQ ID NO:537: (Length of Sequence = 316 Nucleotides)

TAGTAGCACT AAAGCCCCGT TTGGTCACA CTCTCACCTA GGTGAGAACC TGACCAAAAA TGTGGAATTA TTAAACAAAA  
 TGATGGGAAG CCAATGINCT GAACTGAGC TCTGCACTA GGCCCCACA GACCAAAATTA AAATGGAGTC ACTAGTGCTA  
 AATGCTTTGG AGTCAAACAG AAATGTTAAA GAAGATAGAT CCCAAAACAG AGCAGTGTIT TATTTTCTC CAGAAAACAG  
 GAGATTCCAG CATAATAAGA AAGTCTCTC TGTGTAAACC CTTACAAAAA AGTAACCTGA AGTAACCAAT TTTTTT

SEQ ID NO:538: (Length of Sequence = 303 Nucleotides)

ATCTTCATGG GCGTCCTAAC TGTAACAAAA ACCCCACAAT TTGAACAGAA GAACAGAAGT ATCTGGTTAC AGAAGTGCAT  
 TCATACATTT CACAAATGTT TCAGTATCCT CTCTCCCCG ACCCCAGCAT GAGCTTTAAT TGGATGTAAT TATTCTTTCA  
 CCAGCATGCC CATGAAGNG CTAAGGAAAA CATTTACCAA GTCTGTTTCA AAATCTGTCC TTGGCATATC AAACTTTTTC  
 TCTTCTTTT TCATGCTTTT TTTTAAAAA AAAACAGGA GAAAGCGAAT AGAGAGGAAA GAG

SEQ ID NO:539: (Length of Sequence = 362 Nucleotides)

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CATGTCATAG TGGCCTGCTC TCCTAACACA GCACAATTIA GGGCATATTT TCATGATGGT CTATCACTGG ATTACAACAC  
 ATCTCTTCAT TAAAGTCTTG GGAAAGAGGC TTCAACTTTN CTGIGTTGAG AAAACTTCAC AGGTGTGTAA AGTTTGATCA  
 GIATGTATAA TATATTTINAT TACATATATT TNAITTTINAT TTTTCATTTT TTTGCATACA TAGCAGGTGT ATATACTTAT  
 GGGTTATATG AGATATTTTG ATAAAGGCAT GCAATGTGTA ATAATCACAT CAGGGTAAAT GCAGTATCTA TCCATCACC  
 CAAGCATTTA TCCITTTGTGT TACATACAGT CCAATTACAC TC

SEQ ID NO:540: (Length of Sequence = 416 Nucleotides)

CACCAGGGAG AACCAATACA ACAGAAAAA AGCAGAGAAC AGCTATGTGT CCTGCCAGGT CTACCAAAGA TAGTCATCCA  
 AACATGAACA GATGAGAAGG CTGTTTTTCA AGAAGGTGAA AGTGACAGAN TATTCATGA ATCTGAACAC ATGAAGATAC  
 TGAGACACCA GTAGTTCAGC AATAAGTGA GAGAAAACTA AGCAAATGAG AAACCTTAGGA ACAATTATGC AGCAAAGAAC  
 AACTGGATAA GCTGAAAAGT GTTTAAAGAT GCTGCCGTAA AACTTAAGTA TCACAATCAA ATTCTGTATT GTAAAAATAG  
 AGGTATGGGA AGGGTACANG TATGTTGTG GGGCAAATG GTGAGGAGAG CTAAACCCCT CTCTTCCTT AATGAGGAAT  
 TAAATAATCC CATTAA

SEQ ID NO:541: (Length of Sequence = 341 Nucleotides)

GAAATACTTC CAGGCCCTCG AAAGGCCATC CTTTGACAC ATGTAAAAAG CTGTCTTGTT GGCCCGTTAT TCCCACTGAC  
 CCGTCTGAGT GATCACCAG GAGCGCGCG GCAGCAAGCA GAGCTCACC GATTTGGGAC AAGGATTFTA AAGGCAGCTA  
 CAAAGCTGAG CTCTATTTGC TGATGATAGT CTCTGTTTCA CTGTTTAAA TGAAGTCTG ACTCACCATG GTAATTTTNC  
 ACAAATTAAA AACACATTTT GGGTGTGCA ACAGTGGTTC TCATCTTTCC AGGCAGGCAG ATTATTTTAA TGCTGTTTAT  
 ACAGGGAATT GGGACTCTCG G

SEQ ID NO:542: (Length of Sequence = 334 Nucleotides)

TGTGTGTTTC CTACCTTAAC CAATACCTCC TGGAAAAAG AGGTATTGGT ATAAAAATA ACCATACCCA AACATTCCCA  
 CAACATGACC TTAATAAGCT GGTCACAGT AGATTATGGC AGAGGAAAGA AAATTGACTT TAGAATTAGA GAAACTTAGG  
 TTCAAATCTC AGCTCTGTCA TGCTTTGGTT GACCTTCAGT AAGTCCCAT TNCCTCATCT GTAAATGGG AATAACATCT  
 ACTCCACAGC ATCATTAGAA AGATTAAATA GTGGCTGGGC ATGGTGGCTC ATGNCITGTA TCCAGCACT TTTGGGGAGG  
 CTGAGGTGGG GCGG

SEQ ID NO:543: (Length of Sequence = 350 Nucleotides)

ATTGTGTTTC AATTGACAAC ACCTCATTA TGTAAAGCCC AGTGACACTG CTGCTGTTT CAAGTCACIT TTAATTACA  
 CACGTGCTAC TTAATCTTAA AAGCAAAAT AAACATTGGA CTGTTTACA TTCAAGCTA CAATATGGA CCATTGTATT  
 TGGAGGAATG AGTTAATAT GCATTGTAAA ATAAATTAG GGGGTACTTT GCATTACAG CGCTTATGT AATTAGGTTC  
 AGTCAACTGT AATGTTTCAG GTTAATGCT TCCATGGATG TATGCTGTGT AAATAGTGAA CTTACATATC CCTTAATACA  
 TCTGAATTAT TACATAAATC CTTAATATTA

SEQ ID NO:544: (Length of Sequence = 328 Nucleotides)

GGGAGACGAG AACTCTTGAG ATCCGGGGTC ACCTGTNAGT CGCTGGACCC AAGGGGAAG CGTCTTGATT CCTGGAGGAA  
 ATCTCCGAAG TGATGTGTAA CCCTGTGTGT CGCTGCACT TCGGCCGAA CTGCCCTTGG TTCAGTCCCC TGTTCCGTGA  
 GGAGGCGGGG ATCATGTAA AGTGGAGCAC ATCGCTCCC GCTTGGACGC CTTTACCCTT TAAGTGTTC TGATTGATT  
 TGGCTTTGGG TCTACCAAGA ATTCTAGTCA GTTAACTAGC TTTTAAAGCC AGGTTCCTGA ATTTGGTAGG CATGGACACT  
 CCCAGTAG

SEQ ID NO:545: (Length of Sequence = 342 Nucleotides)

GGGCTATTAC CTCTGGGCAC TGGGAAACT GGGAGACGGG ACAAGGGGTG ACCAATTTTT CAGTGTATGC CCTTTTCGAA  
GTGTTAAACT TTTTTTTTTT TTTTTTGAGA CAGGNTCTCA CTCTGTGCCC CTGCTGGAGT GCAATGGTGA GATCGTAACT  
CACTAAAGCC TCAACTTCCT CGGCTCAAGC AATCCTCTCA CCTCAGCCTC CTGAGAAGCT GGGACTACAA GTNTGTGCCA  
CCATACCTGG NTAAATNTTA AAGTTTTTGT AAAGATGGGG GTTTTCCGAT GTTGCCCAAG CTAGTCTCAA ACTNCTGGGC  
TCAAGTGATT TGCCACCTT GG

SEQ ID NO:546: (Length of Sequence = 280 Nucleotides)

CTCGTAATGC CAGCATTTTG GGAGGCTTGA GGOGGGAGGN TCCCTTGAGC CGAGGAGTTC GAGATCAGCC TATGCAACAC  
AGTGAGACCC CTATNCTAT TINATTTAAA AAAAAAAAAA AAAGGGGGTC ACGTTTACTG CCACCATCCC AGGCAGAAAG  
ATGAAGCCTA GAGCCTCTCA CTGCTTCTTA GTGGGTCTTG GGTGTAAAT TGCTGTCTTG GGTATATTTT TTGGCAGAAA  
GCATCTGGCA TCAGGCACTG GTTCTCAAAG TCGGGCCCCC

SEQ ID NO:547: (Length of Sequence = 298 Nucleotides)

CTAAAGAGTT TCACATAGTG GCTCAGTCCA GCCTTGTTGGG GATCTTGCCG GGGCCTGGGG CCGGTGGTCC GGGGCCTAGG  
GGGATGCCIN ACCAACAGAG GCTCTNCAGG CTCTGAAGAT AAGCTGAGGG CAACAGTGGA CAGAGGGGGC TGAACCTGCC  
TCAAGGAGGC TCTTATTCAA GAGCAAGTCT TGCTGGCTTC TNCAGAGGCT GGGGACCAG TGGCCCTTIG GCCAGCCAGG  
ACCAGCAGCN CTNACCACCT GCTGAGGGGC AGTTTGGGTC AGGGGGGNCA CATAGAGG

SEQ ID NO:548: (Length of Sequence = 311 Nucleotides)

GAGACAGGGC TGTTTCTGC ACTACACTGG TCATCTGACC AACTTTCTGC AATGCTAAGA AGGTATTCTT TGACCAAACA  
GCAGTCCACA TACAAGTTTA AAAGGGGCCC TGTTTATGTA GGAACAACAC TGAGGTGGTG CGTAGCAGGT ACAAGACGCC  
CAAATATTTC CAGTTTATCT TACGGCTGGA CTCTATTCT CCCACACTGT TTCTAAAGA AGGTCCACAT TATTTTGGNT  
ACTAGCCTAG TTTAAGTGGA GATACTGTGG GCAACTTNAA AGAAATGACA TCAGGCACAC AGGCTGAGCT T

SEQ ID NO:549: (Length of Sequence = 387 Nucleotides)

TTTATTTTGG TGTAAGACA GGAAGCTGGA AAATACACTG TATTTAAAT TTNCTTGGTT CCCCCTCACA TTGTGGAAAC  
CCCCCCCC CAGAGCTAAT CTGTCAAAC TCAAATACIT AAAAAITACA GCAGCCAAAC AAAAGCATGG GGGAAAAAAA  
AACAAAAACA AAAACCAGAT GGAGAAGGTA GCCTGGGCCA GTAGTGTAC TTGGTGTGGA CGACTGAGGT GCTGAACAGG  
AGCTTCTGTT TCTGTTTTTT TCTTTCTTT CCTCCTTTCT CTTCAGAGAG GGGATCTNGA AGTAGCTGGG TGTGTCCAGT  
TTCATGAAGG CTGCTTCAAT AGCTTGGCTG AAGGAATTTT GAAAACINGG CACAGGAACA CGGGTTT

SEQ ID NO:550: (Length of Sequence = 377 Nucleotides)

CACCCCCAAC TCTTCACCAA GTAGGGGCCC TGGCTTGCAA TTGCAGAAGA GCTTTCCCAT CCCTGGGTGA GCATACCTAC  
TGGTAGTGGC TCCGTGATTC CCTGGGGAGG GGCTCCCA GGTAAACCAAC CAACCTGTG CTACTGCTAT GACCACAGTT  
CTGCTTCTGC TGCCCTCAA CTGGGGAAGA AACAAAGAGC CTGAGGGCTT TACTCAGCT TCTAGCACTA CGCAGTCACC  
ATATAAGAG GAGCCAGTC TCTCTTCTT GTGAACCTT GACCCCCAAC TCTTCACCAA GTGGGGCCCC CAGCTTGGGC  
CAGCAGCACA GTGGCCCCAA CCCTAGGCT GAACATTCCA GTAGCAGCTG CTCGCG

SEQ ID NO:551: (Length of Sequence = 320 Nucleotides)

GAGTTTNTGG TGAGCCGAGA TCAGCCATT GCACTCCAGC CTGAGCAATC AGAACGGTCC GGCTCCTGTT GCTGAGGAAG  
CAGCTCTGGA TGACCTTCAT GATGAAATTT GCAGCCTGCG GCTCAGTCAT GTTGGGGCTA AACCTGTGCC TGGAGGAGAG

GCTGTGTCAG GGCTGCCATG GGCAGGGCCG TGCTGGCTCC CTGGCCAGT GGGAGGAGGG TCTTCCATGG GGACGGACTT  
CAGCTGAGAG CCATGCCCTG GGAAATGTAC CTTTGGGGTC CACATGTTGG AAGATGGGGT GCTGTGAAGG CCACACC

SEQ ID NO:552: (Length of Sequence = 334 Nucleotides)

ACAAACTGAC AAGAGAAAAC AAAGAATTCT TTGGTGATCT GGACACGCTG ATGGGGCCTC TGACCCAGCA CAGCAGCATG  
ACCAATCTTG TCGCTACGT TCGCAAGGA CTGINTTGGC TGCGCATCGA TGCCACITG TTGTAGTGGG TGTCTCAGA  
TCTCTAGCAT CAGACCCAT CACTCTACCT CTACCAGCGC ACTGATGGTC ACTGGTGGAA CTCCACTCAC TGGGGAACGT  
TCTCTTGGT TATGTTTGT TTTATGCTC TTTGTATC TGTAAAAAC AGAAGTCATT GTAAGTTGAC ACTACAACCT  
AAGGGCAGTG TACG

SEQ ID NO:553: (Length of Sequence = 371 Nucleotides)

GAAAGGGGA AAAATCACAA TATGTGTTCT AGACAATATT GGTITAGATT TTTTAAAGAT CTAAAATTCA ATTATGGAAA  
GCCAGCAGCC TGATCCAGTT ACTGTGACTA AAGCAATTGT CAGACCATCT CTAGTCAACC CCTTATGGGT TTTGCAATGT  
GTCTACCCCA ATTTTGGATC AGGAGGGGTC AAACAGAAAT ACAGCAATGT GATTAACTG CTCCTTGCA AACAAATATGA  
AAAGGTTTGT NCTTTCAAAG TAGATTCTAA CAAATCGTCT GCTCACTGTG GGGTAGCAA GNGAGAAAAG CAAATCTTTC  
TATTAGTCTC AAGCAAGTCT TCAGATTAC ACACAATCTA ATGGAGGCAT C

SEQ ID NO:554: (Length of Sequence = 331 Nucleotides)

TTATGACTTT TTCAATAAG GCTATTGTAT CAGCCTGINC TCTCGCTGCT AATAACGACA TACCCAAGAC TGGGTAAATTT  
ATAAAGGAAA GAGGTTTTAT GGAATCACAG TTCCACATGG CTGGGAGGT CTCACAATCA TGGCGGGAGG CAAAGGAGAA  
GCAGATCAC ATCTTACATG GCAGTAGGCA AGAAGAGCAT GTGCAGGGGA ACTCCCTTT ATAAAACCAT CAGATCTAGT  
GAGATTTATT CACTATCAAT GAGAGGCAGC ATGGGAAAAA CTTGCCCTC ATGATTCAT TACTTCCAT TAGGTCCCTN  
CCACAATACA T

SEQ ID NO:555: (Length of Sequence = 305 Nucleotides)

GCTGGGACTA CAGGCGCCCG CCACCACGCC CGGCTAATTT TTTGTATTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC  
AGGATGGTCT CGATTTCCCTG ACCTCATGAT CTGCCCGCCT CGACCTCCCA AAGTGCTGGG ATTACAGGCG TGAGCACCGC  
GCCAGCCCA ACACATGGTA TTTCTGTCA TTTTCATTA GTCTCTGGT TGCTGTGTA TGGTCTCAGG CTTTATTTAC  
ATTTCTCCGA TTACTAACAG ACTTGAACAT TTCAGCACAC TTTTATAGTT ATGAATAAC CCTA

SEQ ID NO:556: (Length of Sequence = 318 Nucleotides)

CTTTTGGT GATINCTAAG CTCTGTTTN CTTATCCTAT ATATATATGT GGTGGTTTT NATTTTAGGA TTTTAAGGTT  
ATCCCTAATA AATTTTGAGA TGTGTCCAT AGCTAGCCTG TTGAGATCTT TTNATATCAA AAGTTAATAT CTGTGGATTT  
NTAATCATTC TTTCTACATA TTTAACAAAG TCATTAGCAA AATATTGAAC AAAACCTGTT ATTCATATCC TTAGATACAG  
AACATCAATA TCCTGAGATA CAGTACATCA TCAAAATGTG GTCCCAAAT GNGCAGCAAT TAGCATCATG TGGGAGCT

SEQ ID NO:557: (Length of Sequence = 349 Nucleotides)

GGAAGCAATG TGCTTCTCT TAACAGAGAT ACTGCACTAT TCTCTATGTA TACTCACTTG ATGGCATGGT ACATGTCCTC  
CAGGATGCT TGCTCAAAGT CCTTGCTCC ATTCACACCT TTCAGATTTT TGCGAAACTC CTAGAGACAG GCCAGTAAGT  
TTTTTCCCT TGCTCAACA CTGAAGCCCC ACCTAAGGAA CTCTTGGGT TTCAGTAAAT AGGACTTAGG AAAAGGTAAG  
CGAAAAACC CACTTCCCA CCCCAGTCCC TTTTCTAGGT TTGGGCCAGC CTTTCTTGA TTCCCTTGA CAGAACCCCA  
TCCATCATGC CCACTGGAAT CCTATGTCC

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SEQ ID NO:558: (Length of Sequence = 279 Nucleotides)

GGGCCAGGCG CTGTGGCTCA CGCTGTAAAT CCTAGCACTT TGGGAGGCCA AGGTGGGCAG ATCACCTGAG ATCAGGAGTT  
 CAAGACCAGC CTGGCCATGT TGAAACCCCA TCTTTACTTG TAATACAAA ATTAGCTGGG CGTGGTGGTG TGCGCCTATA  
 ATCCAGCTG CTGGGAGGC TGAGACAGGA GAACCTCTTG AACCCGGGAG GCAGAGGTN CAGTGAGCCA AGACTGCACC  
 ACTGCATTCC AGCCTGGGCG ACAGAGTGAA ACTGTGTCT

SEQ ID NO:559: (Length of Sequence = 278 Nucleotides)

GAGAAAGCCA AGAGCCATCT GGAGGTGCG CTGGAGGAGA ACGTGAACCG CCGCTGCTG GAGGAGGGCA GCGTGGAGGC  
 GCGCACCATC GAGGACGCCA TTGCAGTGCT CAGCGTGGCG GAGGAGGCG CCGACCGCA CCCAGAAAGA CGCATGCGGG  
 CAGCCTTCAC AGCCTTTNAG GAAGCCAGC TGCCGCGGCT CAAACAAGAG AACCCCAACA TGCGGCTNTC GCAGCTGAAA  
 CAGCTCTCA AGAAGGAGTG GCTCCGCTCT CTTGACAA

SEQ ID NO:560: (Length of Sequence = 304 Nucleotides)

CAAATGTTAT TGGAAGTTAT CTAGAAGGCT CAGTAACCAG AACTTCCTTT CATTCGTCTT TTCTTTTCT TTTTTTTTTT  
 CTTCTGAGAC AGTCTGGCTC TGCTCCAG GCTGGAGTGC AATGGTGTAA TCTCAGCTCA TTGCAACCTC TGCTGCCCGG  
 GTTTGTGCAA TTCTCTGCC TCAGCCTCCC GAGTAGCGGG ATTACAGCA CGTGCCACCA CACCTGGCTA ATTTTTTTTT  
 TTTTTTTTTT TTGTATTTTT AGTAGAGCCG GGGTTTTTAC CATGTTGGCC AGGCTAGTTT CAAA

SEQ ID NO:561: (Length of Sequence = 323 Nucleotides)

GATGGTAAAC ATAAACCCAA ATATATCTGT AATTACATTA AGTGCAAGTG AACCAAAACA GTTCAGATAA AAGACAGTAC  
 CTATTTTATA GCATTATGAC TATCATGAGG TAATATATGT AGAGATTAGA GTACACATGT CATATTAGGA GGTGTGCAAT  
 AAATGATACT TTATTCTGAA GATTAACTA ATTCATACTT AAAAGGATCA AGAACTAGAA TATTAAAAA NTAGAATGTG  
 AATGTTCTG CAAGTTTGA TAAGAACAAG CCCATAAAT AATCTCTAAT TTGCTACATT TAGGGAATAT GGGTAATGAC  
 TAC

SEQ ID NO:562: (Length of Sequence = 214 Nucleotides)

TCTAATNAGG CCTGCGTGC TGTGTCATCC CATGGCGGAA GAAGGAAGGG CAAGAGTGGG TGAGATTGTN AGCAGGAGAG  
 AAGGCTGAAC TTCATATTTT AACAACCCAC TTTCATGATT ATNATAATCT TCGCATTTAT TTTTTCGGT CTCTTCATGT  
 NCCTAACTT TTCTCTGGN TTTTGGTCTT TTGCTTCTC ATTTTATAGAA GCTC

SEQ ID NO:563: (Length of Sequence = 358 Nucleotides)

TTTTTTTGT GAGAAACAGA AGCTGAATAT CCTGATTGTA TTGCCCACAC AGGCGTTCAA TGGCTTAGCA GTGCTAAAGA  
 TTTATTTTTA TTTTTTGGG CTCTGGGCTG ACATTGGAAA TTTTNCIGAA TGAGAAAAAC CATCTCAAC CACTGTTTTT  
 TAACACTGAG TAACTTTGA AATTAACTTT TGCCACAGAC TTGAAATGT TTCTTAATGA ATTTGACCTG AAATTACAAG  
 GTACAACAAC ATAATATGGT AAATTCATTT CAATAAAAAC TAAACTTAA GATTGTCAAG CTGCTTTATA TACTTNCGT  
 GCTATGAGAA GTCAAAACAG CGCTGTATTG CCAAATCC

SEQ ID NO:564: (Length of Sequence = 405 Nucleotides)

ATGTACTGTG TGTTCATAC ACATGTTTC TTAGTCTTA AAATCTGGCT CATGGGGTAA AACTATTAT AATCTCCATC  
 CTCAGATGA GGAAGTGAG ACTTAGAGGT TAAGTACATT TTAGGATAAA GTAGGGTATT TCGATAAATG TTCAAATGT  
 GTTCTGGTC TCTGAGGACT AACTCCAG GCTGCTGGG ATACAAAATA CCTTCTTTT ACCATAGGAG CACTTGGGTA  
 GAATATTGTC AGAAACAATA AACTGGCTGA TATTTAAAGT TCTCTTCAGC TCTGACATTC TATAATTTCA TTGACCTCT

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TTGCATTTAA TTATGTTGAT TTTCCTTTCT ACCCCTTGCT TAGCTAAAAA TATACCCCTT CINTGTCCAT GGACAGGAGG  
ATGGG

SEQ ID NO:565: (Length of Sequence = 196 Nucleotides)

CATCCACATC AGGCAAAGGC AAAGCAGGAC CTGAACTTCC CACCCCAAGC CCTACATCCA TGCAAGCCAG ACCAGACTGG  
GTCAGAGGCT AGAAGGGGNC TCACAGGNTT GCCTGGGGAA GCCTGGGCC AAAACCTGGC CCTNGCTCCA GCCCAGAGNA  
CCCACCTGGG CATNAGACTT GCGGCAGCGT AGGGGT

SEQ ID NO:566: (Length of Sequence = 275 Nucleotides)

TTGGAAAAA GAGAAAAA AATTCTGCIT CATTTACGAA TGTGCCAAA GGAGGCAAGT TTTCAACTGA AAACAAAACA  
TAAAGGTCTA TGTGGATGCA GCCAAATGTT TCTCCATTTA GAAAATCATC ATAAAAGGTG GCAGCACTTT TTTTGTCTGT  
TAACTATATT ACTTATAACT GGCTGCACCA ACATTTATC TCAATTTTTG GAGTGTTCCT TCTGATCAAT CCTAAAAGCA  
ACACAATCAT TTTAGAGGTT GCAGACTACA ACAGC

SEQ ID NO:567: (Length of Sequence = 349 Nucleotides)

CGCTCGTNG TCCCACACAA ATGTTTAAGA AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCCTGGCACA  
AAAGATTCCA GTGCCCTGA AGAGGCTCCC TTCTCTCTGT GGGCTCTCCT AGAAAACCAG CGGGACGGCC TCCCTGCTGA  
TACCGTCTAT AACCTTAGGG GGNCTCGGG CAGGCAAACT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC  
AATGCCACAC CTACTGGTTA CCCTTGAGG GCATTTCTCC AGACAGAAGC CCCTTGAAGC CTAGGTAGGG CAGGATCAGA  
GATACAACCC GTGTTTGTCT CGAAGGGCT

SEQ ID NO:568: (Length of Sequence = 368 Nucleotides)

CTGGTAACTT CCGATTTGGN TTTCOCGCC TCANCCCTTT CCCAGGGCTA TTCTCCTCCC ACCTGCTGCC AGGCCITTTCC  
CTGGCCATCC TGTGTTAAAT GTCATCCCGC CCTACTGTT ATGTTCTCCA CAGCACTGA ACAAGACCCA ACATGCCTTT  
TCACTTCAAG GTTTATCTTT CTATTAGTTT TCCAGAGTC TGCTTCCCTA GTGTCCATCT CCCCCTGCTCG AATGCCTCTT  
GAGAGCCAGT GCTTGTTATTT TGGTCCTNGT GGTATGGGCC TGGCACATAG TAGGCAGTCA GCAGATATTT ATGGAACAAA  
CAAATGAATT TGTGTGACIA TAGTTCATTG TTCATAGTTC ATTCATAG

SEQ ID NO:569: (Length of Sequence = 328 Nucleotides)

TGTCACTTAA TGCACAGCTG GGGCTCAGGA CACAGCTTTG CACACCCTAA GINTCAATA AATGCTAGCT CAGGGCAGAG  
CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCCTAA GTACTCAATA AATGCTAGCT  
CAGGGCAGAG CTTTGCATAC CCTAAGTCT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCCTAA GTGCTCAATA  
AATGCTAGCT CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGNG ACAGAGCTTT GCATACCCTA  
AGGTGCTC

SEQ ID NO:570: (Length of Sequence = 313 Nucleotides)

CCCTAAAAGG CAGAGTGCTT TCTTACCTCC ACACAACCAC GCTAGCTCTA TAGCAGTGGT TCTTAACCAG ATTGAAATGG  
CTGAAATGAC AGACATATAT TTCAGAACCT GGATGGGAAG AAAGCTCAAT GAGATAGAGG AGAAGGTTGA AACGCATCCA  
AGTAAAGCAG TAAAATGATC CAAGAGTTGA AAGATGACTT AGCCATTTTA AGAAAGAACC AAACAGAACT TCTGGAAATA  
AAAAAAAATC ACTACAGGAA TTTTATAATG CAATTGGAAG CATAAATAAC AAAATAAACC AATCTGAGGG AAA

SEQ ID NO:571: (Length of Sequence = 338 Nucleotides)

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AGGAAAGCAG GGGTCTCAAT TCTGTACGAA AGAGGAGGGT GTTTTACTTC CTGGAATTAT AGAGGCCAGA GGTGTCTCTT  
 TTTC AATTTA TTGGGAAGGT TTATTTTAAT ATGGACTTAG AAATAAATAA CTTATTAAAG TGAAGGTTCA CCTGGAGCCT  
 TAGGCTGGCT GCTAAGTGTG AGTCTGGGCT GTTGAAGGGA CTGINCTGTT CINCTGGGTC TCTGTAGGAG TTTGAAGGAG  
 AAGACTGGCC CCAAGGGGTG TTTGAACAGG TTAGATGTGC CCATTGGTTA GAACTTACTT GGATAGGGAG AAGGNTCTA  
 GGGCGTATCC ACAAACTT

SEQ ID NO:572: (Length of Sequence = 375 Nucleotides)

CTATTTCCAG AAGTGACAGC ACAAGTCTGA GTTGCTGTTT GGTCTGGTGA CCTCAGACAC ACTAATTTGA ATTGAAAGCT  
 AAGAGTAAAA ATTINCTGGT TACAGGCGAG TCATACTCTT GCAAGTAGTT AGCAAAGGGA GGCCCAAATT CTCAAGGTTG  
 TTGATGGGGA ACTTGCCACT AAGAGAAGGC AGAGAGGTCC CTAGTGGGTA TATTINCTGC CAAGCCACTT GCCAAAGAAG  
 AGGAACCACA GAAAGAGAGA CATCATGACC NGGAGAAAAA TGTGACTAGA CATGCTAACC TCCAGGINTT TATATATGAC  
 TTGAGTCTGC TGTAATTGGC AGCAGAAATC CAAAATTTGT ATGGGTAGAC CACAA

SEQ ID NO:573: (Length of Sequence = 396 Nucleotides)

GAATCCCCAA AGGAGAGGAG CTAACCTATG ACTATCAGTT TGATTTTNAG GACGATCAGC ACAAGATCCC CTGCCACTGT  
 GGAGCCTGGA ATTGTGCGAA ATGGATGAAC TAAGAAGCTT TGAGGCTACC AGGCAGGGGA GTCCCCCTAC CCACAANCTC  
 TTCCTGAAA GNAATNGAGG GGAAGAGAG GTAGCAGCCA GAGCCAGGAC CCAGGTTTGG GGCTGCCGGC TGACCCGGAG  
 CCCCTGGAGC AGGAGGCTGG GGCAGAGGGC CCTAGGCCAA GCCCACCTG GGCACCAGGG ACAATCCTCT TCCCCACCAC  
 CGGCCCTCAG GCTGGCATCT CTGCCCCCAG CTTCCAGGAG GGGCCAGACA GAAGCAGCCA TTTGGCATCT CAGGTT

SEQ ID NO:574: (Length of Sequence = 373 Nucleotides)

CTAAACAGAT TTAACCTCCT CCCAGCAATC CAGATTAAAT TAATATGCTT TCTTAACGGC ATTCGGCAAT TINTATTAAA  
 GCAATGAAC GTCCATCCCT CTCGTATAAA TTAGGGCAAA AAAATTCATA TGTTTAGGGC ATAGGGAAGG AGGAGTTGTT  
 GGCTGTATAA AAAAGAACA AAAAAAGTA CCGCAAATGG CGTTTCAAAG TCTAGACATC TTCATCATCA ACACAAACAT  
 TCCTCTTAC AAAGGGACCT CAAGTAACCT TAGGCTGGAG GACCCACCTG CGTATGTTTT TINTCTCATT CTTCCTTAC  
 CTCCCTCCA GGCCACCCAA CCCACATTCA GTGGCCCAAG TCACGTGGGG TTT

SEQ ID NO:575: (Length of Sequence = 431 Nucleotides)

GCCCCATT A CTTCTTTGCT TGCTACCACA ACAAGGTATA TTAGCCCTTG AAATTAAAGA TGTGCTGTC CCAGTTGTGC  
 TTGCTTTCAC CTAAATGCAT ACAGTCATAT TCCAAAAGAC TATATATTAG TGATATCTAT ATAGTTCACC CTTCATATAC  
 ATGAGCTCCC GTGTGTGGAG TGAACATAAT GCAGATATAA AATATTGGG AAAAAATTTC ATGTGTACTG AACATGTATA  
 GACTTTTTIN CTTGTATCA TTCTCTAAAT AATACAGAAT AATAACCACT GTTTACATAG CATTTACATT GTGTAGGTA  
 TTATAAATAA TCTGTACATA ATTTAACTG TACAGGAGAA TATGGCATAA GNCATATGTG GATACCACAC CATTTTATAT  
 CAAGTACTTG AGGCCTCTGC AGATTGTGGT G

SEQ ID NO:576: (Length of Sequence = 410 Nucleotides)

GATGCAAACA GCCCAAGGA GGGAGGTGGA AAGGCCAAGG GGCTTGCCCT CCTGCAAGCG CGCCTGTAAA CAAGTCCCCG  
 TGGGGTTTTG GGAGGTGCGC CCACATCTAA GACTGTGCGC CCTGCACTCC CTCTGGATGG CTTGCCGAAT TTGGTCTTCG  
 CTGATCACCA ATTCTGGAAG GGTGGAGAGA CAGTTGGCTG GACAGCTGCC TGATTGCGCC ATGACCCCTC ACGGGTGTCT  
 GTGGGCCAAC ACCAAACGCC AGCCTGCTCT GCTGGCAGGG CTCTACCTG CACAGTCCCT AGGGCTGCAA GAGCAAATGG  
 GGACCTTGGC TNCGGTCTCT TNCAGGGCC TTGGTCAATG ACATCACCAC TTTCTTAGGA CAGCGTCTTG GGGAGCTACC  
 GGAACCTTCG



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SEQ ID NO:577: (Length of Sequence = 405 Nucleotides)

GAATGAAAT GGCATATTG AACATAAACT TAGGGCAGAT TTTTACTACT TTTGAAAAA TGTGGGAAA TATTTCTGTA  
 TGAAACGTAA AACAACTTTT AATTTTTTTT AGAAGTTGAG AGGATTCTAT TTGCAAAGC TGTATTATGA AGCTAAAGAA  
 TATGATCTTG CTAAAAAGTA AGTACAACT GTAACATGTA TTTTTTTTTT AAAATCAATG CCTTTNCTCA TTINCTTCTT  
 TGAAATAGGT AAAAATATGT CCTTAGTAGT TCTTCCTAAG TGTATTCTGG AATAAGGGAT TTATCACTCA GACTGATGCT  
 AAGGACCAGC CTAGATTCCA TTGAGATTGA AACCGTAATT AGTGTITTTCT GCATGCTGCT GCTTTATACC AAGGGCAAGA  
 AATTG

SEQ ID NO:578: (Length of Sequence = 406 Nucleotides)

CGCTACAGGG GGGGCTGAG GCACTGCAGA AAGTGGGCTT GAGCCTCGAG GATGACGGTG CTGCAGGAAC CCGTCCAGGC  
 TGCTATATGG CAAGCACTAA ACCACTATGC TTACCGAGAT GCGTTTTTCC TCGCAGAAGC CCTTTATGCA GAAGTACACT  
 CAGAAGAAGC CTTGTTTTTA CTGGCAACCT GTTATTACCG CTCAGGAAAG GCATATAAAG CATATAGACT CTTGAAAGGA  
 CACAGTTGTA CTACACCGCA ATGCAAATAC CTGCTTGCAA AATGTTGTGT TGATCTCAGC AAGCTTCAG AAGGGGAACA  
 AATCTTATCT GGTGGAGTGT TTAATAAGCA GAAAAGCCAT GATGATATTG TTAGTGAGTT TGGTGATTCA GCTTGCTTTA  
 CTCCTT

SEQ ID NO:579: (Length of Sequence = 374 Nucleotides)

GTGGGCTGTC TCTGGAGTCC ACATTCTGTA ATATTATGCT GCACTAAATA TTAATCTTGA GAACTAGGTG ATATGGTTTG  
 GCTGTGGCCC ACTCAAATCT CATCTTGAAT TGTAGTTCCC ATAATCCCCA CATATCATGG GAGTAACCTG ATGGGAGGAA  
 ACTGAATCAT AGGCGAGTTA TTTCTATGCT GTCCTCATAA TAGTGAGTTT TCACTATATC TGCTGGTTTT ATAAGGGGCT  
 TTCCCCCCTN CCTTTGCTCT GCATTTCTCT TTCGGCCAT TATGAGAGGA AGGACATGTT TGCTTCCCCT TCTGCCATGA  
 TTGTAAGTTT CCTGAGGCCT CTTGAGCCAT GCTGAAGTGT GGAATTTAAT TAAA

SEQ ID NO:580: (Length of Sequence = 396 Nucleotides)

CAGAATAAAC ATTTACTATT AGGAGAGTCA AATCATTTAT TTTCACATGA AAGAGATTAA GTAAAGCAGA ATCTTTGATG  
 GTCTGCTGTG AATTCCTGCG AGTGATTGAG AAATTTCTGA AAACCACTTC CAAATCAATT ATAATATTAA GTAAACTTTG  
 GCTTTAGGAG TAAGAGAGAG AAGGTCTGCG TCCATGTTGG GAAAGAATAG ATATGCCAC AATAATTAGT CTATTACTTG  
 TTTGAAAAGG GTGATTTTCT CGTCATTCA AAGTATTAAG CAAATAAGGA CATATTGAGT ATGTAATTCA TGGAAAANTA  
 AGNAACTTCT TACAGTATGA TTCCTAAAGG ATTATGGATG CCATTATCCA TTTTGGAGTT GGTATTGAAG CTATATC

SEQ ID NO:581: (Length of Sequence = 449 Nucleotides)

CTGCTCCGTG GCTGTTTCAA AGACTGGGCG AAAGGCTGTC CGGAGGGCAG ACCAGGTGCC TTGCCGCAGA GAAAACACCA  
 NAGTCTCCTG TTCGCTCATA AAGAAGTTTT TGGGATGGGA GAGAATCCAG ACCATCTTGG GGCAGCCANG CCTTGCCTT  
 CATTTTTACA GAGGTAGCAC AATTGATTCC AACACAAAC TCCTTCCCCT TTTTAAATG ATTTCTGTTT TAATGCCATA  
 GATCAAAGGC CTCAGAAACC ATTGTGTGTT TCCTCTTTGA AGCAATGACA AGCACTTTAC TTTCACGGTG GTTTTTGTTT  
 TTNCTTATTG CTGTGGAACC TCTTTTGGAG GACGTTAAAG GCGTGTTTTA CTTGTTTTTT TAAGAGTGTG TGATGTGTGT  
 TTTGTAGGAT TCTTGACAGT GCTGTAATAC AGACGGCAAT GCAATAGCC

SEQ ID NO:582: (Length of Sequence = 261 Nucleotides)

CCAGCAGGTC GTACTTGACG TGGCAGGGTC CCGCAGAGGG CCGCGTCAGT GTGCTGAGCT TGGTGGCGGG CACTGGCTTG  
 GACAGTGGCA TGACCGAGG GAAGTGGCGG CCGAGGGGCC TCAGGGGGCT GAGCACGTCC TTGCAGAGGG GCGGGAACGG

GTNCTGCTGG TAGTGGCCAA ANACCTCGAA AACATGGGC TNGCTCTTGA TGTACAGGTG GCGTTTATTT TCATGGATTT  
ATACACACTG GAAAAGCCTC T

SEQ ID NO:583: (Length of Sequence = 399 Nucleotides)

CCCAGGCCAC CATTTAAAGC AGCCATTCCT GCCAAAGAGC CAACATTGAG GCCAGCCGTT GCTCCAGCTA ATGTCTGCAG  
GGCTCCAAGT GAGGCTATGG GGTGACAGA ATTACTGCTG CTAGAGCTAG GTGAGGACCC TGAAGTAGTG AGCACGCTGA  
GGGACTGCT GGATGTAGTG AGAGCATTGG TACCACITGG TGTGTTCTGA NNTGCACTAG CTGCAGCAGC TAGTGCAGCN  
AAATTCTGTA ACTGCATTGC ATTCAACCCT CCCATTGGGT GGAGGCTGCT CAGGGTGTG AGGTTCCCAG AGGAGGCAGT  
CTGCTGAAGG AGTGCTAAAT ACTNGGTCC AAGAGTATTT AGACCAGCAA GGTTCCTCCA CACAGATGCT GCGCTGATT

SEQ ID NO:584: (Length of Sequence = 441 Nucleotides)

GTGTGTTTITA AGGATTAAAT GAGATATTAC ATGTAATGTG CTCATCCCAG TGCCCAGCAC ACAAGAAATG TTCAATAAAA  
TAGGAGGCAT AATTGTCCTG TTTGAATACT AGATAACCCT TTTAATGGAT ATTCTACAAT TATGAATCTA AGGTGCTTTG  
GAGGAGCCTA GGCAATCTAT TCCAAAATTA AATGTAAGGA AGGTACATGA GTAAGGGATG GAGTAGGCCC TGGACCAACA  
CTAGAGCTCC AAATTTCTTA AAAAGCTTGA GCTTCTTTTA CTGTGGCCAC GCCTATAATG GGAATAAATC TGGTCTTCA  
AACAGTCCCT CCCCTCTCTA AGCTCTGCTG GGGAGTAGAG ACATCAGCAG GCTGGTCTG TGNMTAGCTC CTCCCCATCT  
TNGACTCTCA TCCCATTCCC TCTTCTCTAC TACCCATTCA G

SEQ ID NO:585: (Length of Sequence = 326 Nucleotides)

GAAATGCAGG TTCAGCTATT TNGCTCTGC AGAGTCCAGT TAACAAAAGT GAGTNGTGGT ATAAAGAAAG TNATTTTTTT  
TTTTTAAAT ATTCCAAAGC TAGCTGAGGG GAACAAGTAC AGGCTTCTG CCTAGGGGTA TCACITTGCT TTGGAGCAG  
GAAGTAAGCA CTTTTAAAGG GGGCTTAACA TGAATGGCAC ATGGGGTCCG GGAAGTAAG CAAGTGCAGC ATCTACATGT  
TAGTTTGTA CTTATCTAC TAGGTAGTCA AGGTGGTGAC TGCTGTNTC TTGTGGGGC ATGTGTACTT TGGGGTTGTA  
AATTGG

SEQ ID NO:586: (Length of Sequence = 431 Nucleotides)

GAACGAAGGA AAAGCATCAA AACCTACAGA GAAATNTTC AAGAAAAGA GCGGAGAGAG AGAGAGCTGC ATGAAGCATA  
TAAGANCGCT CGGTCCCAGG AGGAGGCAGA GGGGATCCTT CAACAGTACA TTGAGAGGTT CACCATCAGT GAGGCTGTTT  
TCGAACGCTT GGAGATGCCA AAAATTCTGG AAAGAAGCCA TTCAACAGAG CCAAATTTAT CCTCCTTCCT GAATGACCCC  
AATCCCATGA AATACCTGCG GCAACAGTCA CTGCTCCAC CCAATTCAC TGCCACTGTT GAAACCACCA TTGCTCGTGC  
CAGTNTCTG GGATACCAGC ATGTCAAGCA GGCAAGTGGG GTCTNCAAGC AAAACTTGTC ACTTCCCAA AGCAAGTGCC  
TATGCTTGAC ANCCCAGGCC TTACTTCCCA G

SEQ ID NO:587: (Length of Sequence = 338 Nucleotides)

CTCAAGCAAT TCTCCACCT CAGCCTCCA AATAGCTGGG ATCACTGGCA CAAACCACCA TGCCCAGCTA ATTTTGTATT  
TTTTGTAGAG ACAGGGTTT ACCATGTCG CCAGGCTGGT CTCAACCTCC TGGGCTCAAG CAATCCTCTT GCTCGGCT  
CCCAAAGTGC TGGGATTACA GATGTGAGCC ACCGCATCCA GCCCACACC CTCATTTATA CCAATTACCT GCCCAGTAAC  
TGTGGACTTT TGCTTCTCA CCCCTGCTCT GATCTGGAAG GAGAGGGATT ATGTTATAGC TTGTGAGCAC AGTCCCAAAG  
TTCAATATTT CTGCGGGC

SEQ ID NO:588: (Length of Sequence = 277 Nucleotides)

205

AAGAACATTT AAGTAGITCA TACAAAGAAA TATAAATTGT NCTTAAATAT ATCAAAATAT ACTCACCTCA TTCATAGTAA  
AAGAAATAAA AAACGTGCT CTGATGACAT TTTTCATCTA TGAGATTAC AAAGNTCTAA AAATTGAGAA TATACATTTC  
CTATTGCCCTT TGGATGGCAA TTTGGCAGTA ACTATCAAAA GTATAAATAT CTATACCCTT TGAGGTGTCA ATCTCATTTT  
AAAGAATTIA TTCTTCAGCT ATGTACATAC ATGTAGG

SEQ ID NO:589: (Length of Sequence = 353 Nucleotides)

GTAATGAATT ATAAGAATCT GAATTGAGAG CTAAAATATC TGGGTGTIAG GCCTACTCTG CCACGNTTTT NITATTGCA  
AATATTAGAG CTGAACTAGA TGACCTCAA GGCTCTAACC AACTCCAAA CCTACAATTC AATGGCTGAC TGATATACAT  
TGTATACTCT TTA AAAACAA TTA AAATCAA AGANGNTAAT AAATGTGTCA TGTATTATAC AACTATTATA CACGTGTGTG  
TGTATATATA TATATNININ CACAGAGAGG AAAGACATCT ATACATAGNC ATAACCATCA AATCAGTCAG AATTTCATC  
AGACACTTIN CATTTCCAG GTCCATCAGA TGG

SEQ ID NO:590: (Length of Sequence = 364 Nucleotides)

CTCATATACA TAAAAGTGA TAAGAATCCG AAAAGACAGC CAGGGGAATT AAATGCCAGT TGGGGCCAAC GGGGCCCTGA  
TCACGGAAGA GGGCGCCCC AGCTCTCAAT CTTACACAA TCCCTGCACC CAGGGTCACA GAGCATGCGC AGGTCCCTCC  
CGCCCACTTC CGGGCAACT GCCAACCACC GCGCAGGCTG AGCCCCAGGC AGGAAGCAGC CCACTTGGTG GGGTTGGGGT  
ATGAGTCTT CCTCGCGGG GCTCGGTGGG TCCTGAGTAT TCTTTGGCG GATTINCTGA TCCGTCTGCT CCAGGTGAGC  
TNGGGAAGGC CCCAGGAAA GGCANAAAG GGCCTTTGCC AGGG

SEQ ID NO:591: (Length of Sequence = 311 Nucleotides)

GAAAGGGGAA TAGGGAGTTA ACGTTTATC AATAGAGTTT GGAAGATGA AAACGTTCTA GAGATGAGTG GTGGTGATGC  
CACATAACAA TGTGAGGGTA CTTAATACCA CTGAAGTGA TGTTTAAAT GGCAAAAGG GTAAATTTTA TGTTATGTAT  
ATTTTACCAG AATTTTTTTT TTAAGCTTA CTGCATGGGG ACCAAGCGTG GTGGCTCACA CCTGTAATCC CAGCACTTTG  
GGAGGCCNAG GCGGGTGGT CACTTGAGGT CAGGAGTTCG AGACCAGCCT AGCCAACATG TTGAAACCCC G

SEQ ID NO:592: (Length of Sequence = 358 Nucleotides)

ATTTTGGTTT CTACCCATCA TCTTCTCTC AAAGGAACCA GGGTCTCTG GGGATTGGC TGATGCCAGG GGATGGAGAG  
TGTCAGTTGG NTCTGAAGGG GAGGCTCGCA GCATGTGTGT GGCAGGTCAG ACAGACCCAA GAGCCAGCTT GGTGGGGCAT  
CCCTGGCTAC CTTGGGGACA CAGTGAGCGC CGAACTAAAT AACATCAGGA ATGNTCACA ACGCAATGAG TAAGGGGAAT  
CTGAGTCTAT AGGGATACAG ACCCAGAGGT AAATNGCCAT GGCCACCCAC TTTCTACAG GAGAATGTGA CTAGTTGAGC  
GTAGGAACAT GGAACAAAT GTAGAGGTG GCTGACAT

SEQ ID NO:593: (Length of Sequence = 354 Nucleotides)

GACAGACTGA AGGAATATAT GCAGCTTAAT TTAACATTTT TTGAAATTTT ATATTGCAGA AGTTGTACAT ATTTNCTGTT  
GTGAAATTAG AAAGANTTGA CAGGCAAGGA GGGTGTCTA CAAAGCACTC CATAGATCCA CCATACTGAG ACAATGCTTA  
ATGCTTTGAT GGATTTATTT ATTTNATACT TTCTATGCAT ATGCATGTAT TGTATAAATA CGNATGCATG GTTAAATAGA  
AATGGTCTC CTGGGTGTTT TGTATTATCCA TTTATTTGTTG TGAAGTAAAT CCCCAGAGG GTAGGTTTGC TTTTGCTGA  
GGAGTCTTTT GCTACATACT GGCTGTACAT AATG

SEQ ID NO:594: (Length of Sequence = 319 Nucleotides)

206

GAACATGGCC GTGAACTGCT CGGAGATGCG CTGGAACAGC TCCTGGATGG CCGTGCTGTT CCCGATGAAG GTGGAGGACA  
TCTTGAGGCC GCGGGGCGGG ATGTCACACA CGGCCACCTT CACGTTGTTG GGGATCCACT CCACGAAGTA GCTGCTGTTT  
TTGCTCTGGA TGGCCAGCAT CTGCTGTGTC ACCTCCTTCA TGGACATGCG GCCCCGGAAC ACGGTGGCCA CCGTCAAGTA  
GCGGCCGTGG CGCGGGTCGC AGGCGGCCAT CATGTTCTTG GCATCGAACA TCTGCTTGGG TGAGCTCGGG CACGGTCAA

SEQ ID NO:595: (Length of Sequence = 370 Nucleotides)

GAAGAATANA AAGAAAAATC CAAAATGAAG AGTATTATAC AAGACAACATA GTCAATAGTC TTCAAAGTGT CAAGGTCATG  
AAAAATTGAG GAAGCATCCC AGACTGAAGG GGAATAAGA AAAGTGACAA CTAAATGTAA TGGGTGATTG TGGATTAGAT  
CCTGGAATTG AAAAAGAACA TTCATGGAAC AACTGACAAA TTTGAATAAG GTCTGTAGAT CAGTAACAGT ATTGCATCAG  
TGTTAATCTC CTGGTTTAGA TCATGTCTTA ATGGAAATGT TTTGTACTAT TTTTGTGGA CTCTTAAGGA ATGTGGGTGG  
AGGACACGGA TGAGACCTAC TTGCATCGAC AACAAGGCGT TCTACGGACA

SEQ ID NO:596: (Length of Sequence = 335 Nucleotides)

CCACAGAGCC CCAACTCCCC CCACAGGAGC CAGTCCCCC TCGAAGGCCT GGAGCAGCCG GCCTGTGACA CCTGAAGCCG  
CCAGCTCGCC ACAGGGGCCA GGGAGCTGGA GATGGCCTCC AGCGTCAGTG CCAAGACTGA GCGGGCCCTC CAGTGTGTGTC  
CAAGGAAATG TAGAATCACT TTGTAGATAT GGAGATGAAG AAGACAAATC TTTATTATAA TATTGATCAG TTTTATGCCG  
CATTTTCGT GGCAGTAGAC CACATCTGTT CGTCTGCACA GCTGTGAGGC GATGCTGTTT CATCTGCACA TGAAGGACCC  
CCCATACAAG CCTGT

SEQ ID NO:597: (Length of Sequence = 336 Nucleotides)

CTCCTGAACA TCACAAACTT GGTTCCTACC TACCACACGA GTAGCCAAAA GAAAAGAAGC ACTAATAGAG AAAGGGGTGT  
CTCACACCAG ACAGAGGACC TCTGCTGTCA ATTAGATCCA GTATCATGAC CTAACCTTAA GTGTGGAAAA GAGTTCAGAT  
CTCTGAGACA CTGTGAAGAA ATGGATGGCT CATGTAAACAT CTCTGATCCC TCAGTCCCCA ACCCTGGACG TGTTTCATTT  
ACAACATTCA TAGGAGTTAA CTAGCAGTG TTGCAAGTTA AGGTTCNAAA CCAAATTATT TAATCAGTGT CCCCCAATA  
AAATCACTTA TCCCATTTTA TGTCTAGTTT AGTTTT

SEQ ID NO:598: (Length of Sequence = 402 Nucleotides)

ACCACTACAC AATATATCTA TGTAACAAAA CTGCATTCTT ACCCCTTAAA TTCATACAAA TAAAAAAAT TAAAAAATAA  
ATAAAGTAGG ACAATCCCC AGATAAATAA ATTAATAAAT AAATAAATAA ATAAATAAAT AAATAACTTT AGCTCTTGCC  
TTCTCTTACA CATAAGTTAA TGCTGATGG GGTAGTGGT TATGCTTCTG TAACTATAA TCAGATGTAC TCTTGACCCC  
AACTTAGAT GCGATTTTNC GTATACTGGA ATCTTTGCTA CCTGTATATA AACTGTGGAA CTGAAAATGC TGCATTGGGA  
GCAGTCTGAT AGGNTCTGTC CTAAAGGGCT ACTCTGAGGG GCTCTAGGGG CTTCACTCTA CAGGCCCCCA GGGAGGACTG  
CT

SEQ ID NO:599: (Length of Sequence = 369 Nucleotides)

CTCAACAAAG TTTGGATTTT NTCCACGATG ACTCCTTGGG TGAATTTTAA ATCAAGTTAT TTCAACCATT TTNCTCATAT  
ATTTCTGTCA TCCCTATTCT GGTATTCAGT GAATACATGG GAGAGGTATG TNAITCTCAG CTCCCACAGC CCATAAGTCG  
GGGAACCAGG ACTTCATTCC CCTCTGCTCT AACTCAGACT GTGAGGTCTAT TGAGGGCAAG ACTGATGAAT TGTTCTCTT  
CCTATCACTG GTGCCAAGCA CAGTAGTTGG CATAAAGAAG TTAATCAATA AAGAGGGGGT GAATTTAATG AAAGACAGAG  
GAAGNGGGA CCTGGGGGAA GAGGTGGGCA TAAAGTGAAG GTACAAACA

SEQ ID NO:600: (Length of Sequence = 342 Nucleotides)

207

CCGCTCTCTG GGTTCAGCA ATTCTCTGCT CTCAGCCTCC CGAGTAGCTG GGAATACAGG CGTGGGCTCC ACCACCACGC  
 CCGGCTAATT TTTGTAATTT NAGTAAAGAT GGGGTTTCTC CATGTTGGCC AGGCTGGTCT TGAATCTCTG ACCTCAGGTC  
 ATCCGCCCCC CTCGGCCTCC CAAAGTGCTG GGATTACAGG CGTGAGCAGN CGCACCCGGC CAGCTGCTTC TATTTTAATC  
 TGAATTTGGA AACACCTTCC TACTTTAAGG CACAGGATCA GGGTAAGAAC CCACATGTAC GAGCTAACAG AGCTGCACTT  
 CAAATTTACT TAAGTTAATT AA

SEQ ID NO:601: (Length of Sequence = 319 Nucleotides)

AGTACTATTC TGCCATAAAA AAAAGAATGA GATCCTATCA CTTGCAACAT CTTGGATGGA ACTGGAGGTC ATTATGTTAA  
 GTGAAATAAG TCAGGCACAG AAAGAAAAAC TTTGCATATT CTCATCTATT TGTGAGAACT GAAATTTAAA ACAATTGANC  
 TCACGGAAAT AGAGAGTATA ATGATGGTTT CCAGAGACTG GGAAAGGTAT TGGGTGGGGG GCAGGGAATG GGGAGGGTTA  
 ATAAGTACAA TGCAATGAAT ACGATCTNGT ATTTTACAGC ACAAAGGGT GGCTATGGTC AACAATAATT TATAGTACA

SEQ ID NO:602: (Length of Sequence = 334 Nucleotides)

CACCCACAGA CTGCCAAGTG GGACAACTTT CTGGCTTTTG AAAGGCTCCT TCTTCAGAGC ATTGGGGAGT CAGCAATGTC  
 CGTTGTGTTA AATCAGCTGC TGCCCATGAT TAAGCCTGTA ACCCAGAGAA CCAACGAGGA CTACAGCCCT GAGGAACTGC  
 TGATCTTCT CATATATATT TATNCTGTCA CTGGAGAGCT CACGGTAGAC AAAGACCTGT GTGAAGCAGA AGAAAAAGTC  
 AAGAAAGCAT TGGCTCAGGT CTTCTGTGAG GAATCTGGAT TGTACCTTT GCTGCAAAA ATTACGGACT GGGGACTCTT  
 CAATTAATCT GACA

SEQ ID NO:603: (Length of Sequence = 410 Nucleotides)

TTTCACCATG TTAGCCAGGA TGGTCTCGAT CTTCTGACCT TGTGATCCGC CTGCCTCGGC CTCCCAAAGT GCTTGTATT  
 CAGGCGTGAG CANCCGCGCC CAGCCAGGAT TATTATTTTT TAAATCAGAG AACTGAGTA CCACTAAAG GGACTTAAAT  
 TATGCAATTG GAATGAACT AAAGTGAATT GAACATTTAG TTTCACTTAG ATTTTATTTT TCCTGCCAAC TGTATATGA  
 GAGTTTGAGA GGGAGCCAG ATTAGACTTA GAGAAAAATA AATAAATTAC ATTTTATCTG CACACATGAA TTCTAGAGTG  
 AGTTAAATTT ACCACAGCGG GGCATATATA TGTATATATA TGATACCNIG TTTTATATA GCTCCNTATA GTTTTAAAG  
 CACTTGTATC

SEQ ID NO:604: (Length of Sequence = 399 Nucleotides)

TCTCTAAGCA AAAAGAAAAT GATGAAAGAA GCAACTTGG AGCATCAGAA AGGAAGAAAG AACATGATAA AATGAAAATA  
 TGAGCTCCTA TTATGAACAT CGTATTACCA TTCATTGTA AACTTAATCG TATATTTATA TATAAGCATC CTTCAGAGAT  
 GCTGTGGGTT CAGTTTCAGN CCACTACAAT AAAGTGAATA TAGCAATAAA GCAACTCATA TGAATTTTTT GGTTCCTCAG  
 TGCATATAAA ATTAANCTTC ATGCTATACT GTAGTCATTT AAGCATGCAA TAGCAATTATG TCTAAAAANT GTACATACCT  
 TTATTTAAAA ACGCTTTTAT TGCTTAAAN AGGCTAAATG GCCATCTGA GCCATCGGCT TTTTCTCTGG CAGAGGGGG

SEQ ID NO:605: (Length of Sequence = 372 Nucleotides)

ATGCCCTAGA AATCCTACCA CCTCCAGAA ATGATAGTTA TGGAAATTAA CATGGCATGT CAGATATGGT TCGCTGATGC  
 CTTGCTTTAG TTCTCAGAAA TAAGGCTTTA AAAGACTGGC ATGTTTCAGG ATTGCTGTCA GGAAATGATA ATTTAAAATA  
 CCCAAGAGTA CACTAAGAAT TATGGAAGCA TCTGTGAAAC TAATAAGCCA GTGGACATAC TGATTTTTAC CAATGTGTCT  
 ACATACTATA TTAAAAAACT TCCTACAAAG TATGTGCCA ATTCAATTCA TCTGAGGATG TGAAACACT ACAGTGTACC  
 TTAAACATC ACATTCACAA CCTGACAGA CTGAAATAAA ATGAAATTAG GG

SEQ ID NO:606: (Length of Sequence = 399 Nucleotides)

208

TGCCTTCCTT TCTTCAATTC GAGACAGCAG TATCATTAGT GTTGTATAGG TTATAATTAA ATCTAAGTAG TTCTTTGTTA  
 AATCAAAGTT TACAGTAATA TCAAAGAAGA CTTGGCAAAC GTCAATAGTA TTCAGCAATT CACAAACATG GTCTTTAAAT  
 TCCATAACAT CTACAAATGT GAAGTAATAT AATGCCAGAT TTINCAGAAT CTCTGATTTT CCTTTCTGTA GTTGTGCAAG  
 CTGTTGATTG TTGTTGCGGG TTTCTACAGC AGGGAATTTT CTGACTATGA ATTTCCAGC AGATTCCAGG NTTTTGTGCA  
 TAAGATAGGA TGGNTTTGCC NTGGGGNCTC CACATGCCNT TCTTGATGTT GTAGAGGCGG GTGAGCATGC CGACGGCCC

SEQ ID NO:607: (Length of Sequence = 412 Nucleotides)

CTGTACCCCTT ATAAAGAGTG AAAGCCCTGC CCCCTTCTCC TATAGAACCC CTAGCAAGGA GACTGGAAGA NTCAAAAACA  
 ATCCACCCAA AAAATGGCCT GCAGGGACAC AGTCCCAGAG AAAGAGACTA TGTACAACAA GGTACAGTAA GTAAGACCTG  
 CCCACACACA GGACTTCCAA TCGACTTCTT AGTGCTTACT CCTACAGATG AACAGATCAA CCAGGGCCAC CAGATGCTCC  
 AGGAAAGACA GGAGTCCAAA AAGAAAATTC GGTAAGTTTG AATATATTTT GAGCAAATTT TCAGTTCTGT TGAAGTATTG  
 GGGGACATT CAACAGTGAG TAGTAGTTTA GGGGAACAG CTGGCACCTC TGGCAGTCG CTGAGAGGTC AANCCAGCGT  
 NTAGGTTGCT TT

SEQ ID NO:608: (Length of Sequence = 419 Nucleotides)

ATGAAGGCAG CTGAAGTCTC CATCAAGTTT CTGCCTCCCC AACGTAATAT GGAAGTCGTT CTGGCTGTAG GACCCAGCT  
 GATTGGAATT GGAAAGCACA GTGCAGCTGC AGAGCTCTAT CTGAATCTGG ACCTTGTCAG GGAAGCAATC GATGCTTTCA  
 TCGAGGGTGA GGAGTGAAC AAGGCGAAGG TTGTAGCTAA GGAGTTAGAT CCCAGGTATG AAGACTATGT GGACCAGCAT  
 TATAAAGAGT TCCTCAAGAA TCAGGGCAAA GTGGACTGCG TGGTGGTGT GGATGTGATA GCTGCTTTGG ACCTGTATGT  
 GGAGCAGGGC CAGTGGGGAC AAGTGCATTG AAACAGCTAC CAAGCAGAAC TACAAGATTC TGCACAAGTA TGTGGCTTTG  
 TATGCAACTC ACTTGATCC

SEQ ID NO:609: (Length of Sequence = 337 Nucleotides)

GGTGAAGTT GTAGTGAGCC GAGATCATGC CACTGCATC CAGGTTGGGT GACAGAGAGA GGCTCCATCT CATAAAAAA  
 GAAAGAAAA AGCATTTCTG AAAGGAATAA AAAACAAAT GATAACATCC CCTAATCTCT AGTTGTTGGG ATGTAGTATC  
 CTTCAATTGA TCAGGAAATC ATATGATTGT CCTTAAATTA TTAAGTTGGC AGAATTGTG TGGTTTCATA ATGATGCTTG  
 TAAGATGATA TTTAATGGA AATGTTTTAG ACTATATCIN TTGTGTTTT TNCCTCTG TNCTGTTAAG GCTTAAANCT  
 ACCCCCTTTA AAAACAG

SEQ ID NO:610: (Length of Sequence = 441 Nucleotides)

TAAGCCAGAG ACATTTCACT GTATTAATCT TGATACTAAT TACTAAGGCT TTTCTGTGGA CATTAAATTT GATCTGTTTA  
 ATTGCAAATA CAATAAAGT CGTGATTTAT GCTTAATGTT TCTGCTAGGC TGATGACATT TTGAAAATGG CACTTATAGC  
 CTGGTTTGTC TTGGTTACAA CTTTGTGGC TCCAGATGCT AAAAAAATC TAATTGAGTA AGTAAATAAT GCAGCTAAGC  
 GTGCCTCTCT CGCTTCGAA AAGTTTTTTC TACTCCTTTT TCTCCCTGGA GAGGCCCTGC TGCACACTGA TGCTGATCTA  
 AGGAAATGCC TTGCTTCTT TGCCACTGAG CAATGTTAGA ATCACTAGGA GGGCAGGGCT ATCCCACTGG TCACTCTGTC  
 CCAGCATATC TACCATGAAG TCAGCAGGGA CTACAACTC C

SEQ ID NO:611: (Length of Sequence = 344 Nucleotides)

TTTGGTACAG TAATTAGGTT TGGTTGATTC GGTTATGGGG GTATACACGC ACATGCAAAC ACACACAGGG TGTGCGTGTG  
 TGTATAAGG GGCATATACA CATGCACACA TATACACATA TGTTATATAG GATGTGTGTA TATGTGTGTA TATATATAGG  
 GTGTGTATGT ATCCTATATA TGTCATATA CATGTATATG TGTATATAT ACATGTATAT GTACACATGT GTGCATATGT

GTACATATAT GTGTATATAT GTATATATCC CACATCTCCA ATTTCCTAT ACGTATATAC ACACATATAT GTTATATAGG  
GTGTACAGAT ATAGGATATG TGTG

SEQ ID NO:612: (Length of Sequence = 384 Nucleotides)

TGATGACCAT AAGCCCATGC TTTTCATAGA TGTTAAGGG TTAAATGAGG TAATGCATGT CGAGTGCTCA GCCAACTGAG  
ATTCAGGAAG CGCTCAATAG ATGCTGGCTG TCATTATTAA CTGAGTAAGT AATCCTTTTC CCACAGAAGC AGTAGAAGGC  
TGACGATGTG TGTGAAAAGG ATGGATACAA TTCCCTGGGC CACAAATAAA GGTTTTTTTG GTTGTGTGTG TTGTTTAAAT  
GAACTGAAAT GAGTTTGAGA GATTCATATA TTATTTTACA ATACTTCTTA ATGCTAGTTT AAAAAGTTCA ACATTGTCAT  
TCTACTCCAC TTCGTATGA GATAAGTATA TGAGGGNGCT TAATCCCCG NTAAACTAAG CAAG

SEQ ID NO:613: (Length of Sequence = 342 Nucleotides)

TATTTATTTT TGTGGGIGTC GACTTCCTAT GIGGGCTTTT TGGGIGACAC TCCCTTAAGG GTTCAGTTTG ACAATTCTNA  
GAGTTGTCTT GCAGTTGGAG GCCACCAGAG GTATCTAAGC TCCCTGCTTC CTATTNATA ATCTCCAGC CCCAGCAGGT  
CCACTCCTGG TTCCTGTGTG TTTGGCCCGG GCACAATCCC CACTGCTTTG CTAGACGTGC TTTCTGCCAT GTGGCTTTGG  
GCCTAGAGCT TGTGATAAT TGCAGCTTGT GGCAGTGGAA ATATGGCTGA ATGAGCGTCT AAACCCCTGG GTNGGGGGNC  
TNAANTNCNN GGGTTTTTAA AA

SEQ ID NO:614: (Length of Sequence = 393 Nucleotides)

CAGTGTATT AACATAGCC AGGAGGTGGA AGCCACCTAA ATGTCCATCA ACAGATGGAT GGATAAATGA AATGTGGTCT  
ATACATACAA TGGAAATATTA TTCAGCTTTA AAAAGGAGC AAATCCTGCC ATGTGCTACA ACGTGGATGA ACCTTGAGGA  
TGTTTTGCTA AGTGACATAA GCCAGTCACA AAAAGACAAA CGCTGCATGA TTCCATTAT ATGAGGAATC TAAAGTAGTC  
AAACTCTTAG AAAGTAGAAT AGTGGTTAGC AGGGGTIAGG GGGAGGGGAA AAAGAAAAGT TACTGTTTTAA TGGCTATAGA  
GTTTCAGATA TGCAATACGN NAATTTCTGG GGGATTCTTT TGCACCACCA ATGTGCACCG TATAATTCCA CTT

SEQ ID NO:615: (Length of Sequence = 310 Nucleotides)

ATTATATACA TTCCITACT GATTTTTTAA AATGTGTCA ATATCTTCAG TGAACCTTA ACAATCTGGG GAACGTTTTT  
CCTCAATTAC CACTTCAGCA ACGTTCATAC GAAATCAAGG CTGCGCTCA TGTCACTGTC AGGNTCAACT TTAACCTGAA  
GGTTTGTGTT TGCTCTAAC ATCTTCAGAG TGAGCTTTAG GGATGCCTGA AGGATGGACA GTACAAGCAA GCAGCTACTT  
CCATGATACA GTGGGAAGAT AAAAGGCCC ATTCAGTCCA GCGGTGACCT GTAAATCCAG CTTGCCCTCC

SEQ ID NO:616: (Length of Sequence = 266 Nucleotides)

GAGATGGAGT CTCGCTCTAT CACCCAGGCT GGAGTTCAGT GGCACGATCT CGACTCACTG CAAGCNCOC CCCCCAGGTT  
CACGCCATTN TCCTGCCTCA NCCTCTGAG CAGCTGGGAC TACTGGTGCC CACCACCACT CCCAGCTAAT TTTTNTIATT  
TTTGGTAGAG ACGGGGTTTC ACGGTGTIAG CCAGGATGGT CTCGATCTCC TGACCTCGTG ATCCACCCGC NTGGGGCTCC  
CAAAGTGCTG GGATTACGAG CGTAAG

SEQ ID NO:617: (Length of Sequence = 376 Nucleotides)

ATAATAATGA AAAGTGAAGG GTGGGGGTGC TGGCCACCTC CCAITTCITT GCCTGGGTGG TGGTGACCAC GGCGCCCTTG  
TGTCCTTTCC ATTGGTTACT GAGGACCATT GCCCTCATGG GCCCAGGCCA CAGGCACCCA CCTGTNAGCC TCACCTGCCA  
CCCTCTTCCA TGTGTGGCTN TTGCCCCCTGG GGCTGGCCTG GGCATGGGGG AGCTTATNTC CCCGACCAGG GGCTTGGCCA  
TGTNTCTTC ACAANCCCCA CTCCCCGGG ACTGAGCCTC CACTCTCTGC TGGGCTGAGG GCTCTGTGGT NGCCAGGAG  
CCCTCCAGC CAGTGCCAG CCCATCCCAT CATCAGCACT TGGTTTAAAG CTTCAA

SEQ ID NO:618: (Length of Sequence = 352 Nucleotides)

GCCCCATCCTG GCTAACACGG TGAACCCCGT CTCTACTAAA AATACAAAAA ATTAGCCAGG CGTGGTGGCG GGTGCCTGTA  
GTCCACGCTA CTTGGGAGGC TGAGGCAGGA GAATGGCATG AACCCGGGAG GTGGAGCTTG CAATGAGCCA AGACTGCGCC  
ACTGCACTCC AGCATGGGCG ACGGAGCAAG ACTCTGTCTC AAAAAAATAA TAATAATAAT AAAATAAAAA GTTTGTAGT  
ATTAGCAGAT ACATATTACT AGGTACCCCG CATGCTCAAT GAAGTGTGG GNTACTCTNA AAAAGTGTCC AATCTTACAG  
GTGTGACTTC CTCTGGAAC GCAAATTCCT TT

SEQ ID NO:619: (Length of Sequence = 359 Nucleotides)

AAAAAAAACG ACCCCACAA GGGGAAGGC CCCAGTGGG CCCCTGCCTG TNGTNCCTC TGGCTCCAGA GATGTCTGCA  
TAGGCCTCAG CTTCTCACTG GCCAATCTCC TCTTCATGG CACCAGCCAC TGCTAAACAT CCTTCCCTCA CTTCTGTGT  
AAGCTTGCTC CCCTGAGCCA CAGGTTCAC ATCTAAACCT CAGCTCCAGG GAAAGGAAGA ACCAATGGAA GTGCCAGAGT  
CCTGGGGCAA GCCAGAGCAT CACCTGTCAG CAAACCTCTG CTGGGCACTC TAAGCAAGCA CAGGACAAGN CCCAGAGTTT  
AGTGTGTCCA GTATCCAGCA TGGNGACAGC ACATGCATT

SEQ ID NO:620: (Length of Sequence = 447 Nucleotides)

CTCTCTCAGC ACAGCCTGGG GAGGGGTCA TTGTTCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG  
CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCACTTT CATCTGGTTC TGACTCTAAG CTCAGTGCTC TCTCCACTAC  
CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA  
TTATCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCACCACCA TGCCCTGGGAT AATTTTTTGT ATTTTTTAAG  
TAGGACACGG TTTCACCATG TTTGGCCAGG CTGGTCTTGG AACTTCTTGA GGTGTAAATG ATCTTNCCTC ACCTTNTGCC  
TTCCCAAGTG CTTGGGATTT ACAAGGTTTT AAGCCACCCG AATCCAT

SEQ ID NO:621: (Length of Sequence = 237 Nucleotides)

CAATACCCCT GGTTCCTGGG GCAGGTGTC TGGGATCCTG GACAGGAGGG TCAGGTGAT TTTAACCAG AGAGACCTGA  
TCTCATCACT GTCTTTTGA GGGGAGAGAA GTTCGTNCCG GCCAAAGGG ACCAGTGTGT AGAAGTGTCT CTCCAGCTCC  
TTGGCGATGT CACTNGTGGT CTTGGCGTIN ATGGAGCCTA CAGGGGCCCT AGGACCACTG CCCCNTTGG CAGCGGC

SEQ ID NO:622: (Length of Sequence = 247 Nucleotides)

AGAAGGTCAA TAATAACAAA CTCTTCAAG GTAAAGCAGG ATGTTGGAAA CCATTGCAAG GAAGCTAAAA ACCTTGAAAA  
AAGATTAGAA GAATGGCTAA CTAGAATAAA CAGTGTAGAG AAGACCTTAA ATGACCTGAT GGAGCTGAAA ACCATGGCAC  
GAGAACTACG TGATGCATGC ACAAGCTTCA ATAGACAATT CGATCAAGTG GAAGAAAGGG TATCAGTGAT TGAAGATCAA  
ATAAATG

SEQ ID NO:623: (Length of Sequence = 315 Nucleotides)

AATTTAGGTT TGTTTTATTT AAGTTTAAATG TTAATTCCAT GCTGTGTTTC AGTAAGANCA ATACAGATTG TGTATCTGTG  
GCTCCAGTCA GATATCCAGT AGTACAAATN AGCTTCAAGT TACACATACT GANCAAAAGA GGTGAGCGA GCGAAGGAGG  
GGAGGAGTGA GGGGAAGGAG GTAGGGGAG GGGGAAGGAG AAGAAACAAA AGANTTGAAC AGGCATGCAG GCTTTTCCAT  
ACCACCTTCA ACGCTAACCT GCTTCAGTGG GAGAGTAAAG TAGGCAAGAN TGAGCAGCCA CGGATTGTTG AACTG

SEQ ID NO:624: (Length of Sequence = 375 Nucleotides)

CCATGTTGGC CAGGTCTCGA ACTCCTGGCA TCAGGTGATC CGCCCGTTTC AGCCTCCAA AGTGCTGGGA TTACAGGCTT  
GAGCCACCAG GCCTGGCCCG TTAATATTGT TATTTTAA TGCATTAGTA AAAAAAAAAA AATTTTAAAT TGCTAGAACA



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TTAAATATCA ATACCCACAT TAATAAAGC TATTTGGGAG CCTTAATAAT TATCAATGGT GTAAAGGGT CCTGAGACCA  
 AAAAGTTTGA CTTCACCAGG TGTTTGAACA CTACAGATCC CATCTTGCCC ATGAAGCTTC CCTAGACATC CCCACCCAC  
 CGTGCTCCNT TCTGCATCCT ACAATAGCAT CCACTGGTAA GGGCCACTTA TTTTA

SEQ ID NO:625: (Length of Sequence = 305 Nucleotides)

GTTCCTAGAT TACTCAAAT TAGTACTCTT CCATCTTTTC TTGTTGCTAT TCTTTTAAAA TCACAAGAAG TCCATACTT  
 AAGTAGGAAT TTGTATAATG TAACTTATTG TGAGTATATT TCCTTACCAG CTCATAAAGA ACTATGTAAA CTGGAATGCA  
 TATTTTINAC ATAAAAATAG CAAAAAATAA AAAANCAAAA AAAAAACAGT ACTGGCCTAA TACTAGTNGA NITACAGAAT  
 ANGGGTAAAT ANIACATGNN CATCCTTACA GAGTGAGCAT AAACAATACA TGGTAATAAT ATTTA

SEQ ID NO:626: (Length of Sequence = 300 Nucleotides)

AGCAATCACA TAAGGAAGGC ACCTCGAGTC TAGTAACACT GTGACTCTTG CGGTCTCTTA GAGGTACTTG GTGGTCTTGG  
 ATAAGATCTG GAAGAATCTT TTGGATTTC AGACATAGGC TCTGTGCTTC TTCCCTTACT TTCTCCCAA CAAATGGCAT  
 CTCTCTCTCT CTCTCTCTGT GCTGAGCTGC CTAGAAGTGT GGGTGGGATC ACACAAGCAC CCTTNTGGCC ATTGCCCTTG  
 GGACTGTGCT AGGTGAGACC TGAAGTCAGC ACAGCATTGG GTCTACCCA ACACCTGTGG

SEQ ID NO:627: (Length of Sequence = 369 Nucleotides)

GAAAAAGAGA GAGGAGAGGG AGTCAGGAGT GCTTTGGAAC TGGAGGTTTG CTTTCCACTG ACAACATCCA TATCINCTGC  
 TAATGCCAAC ATGCTCCCAA GTGTCTTAGT GGGTCCACA AAGTTGATCC AGCCAGAAG AGTTGCAGG ACAGTCAAGA  
 AACCAGAGGT GCTGCCACA TCCCATCAC TCCCTTCC CAACTCCAG CCTTGCCCCA AAAGCAGCAG CTCAGGACAA  
 CCTGAGATAC TACTGINATG GGTCCCGGG AGGAGGACAG CAGGAGTCTG AACTCCAGAG GAGGGGAAT ATGGGTAAAA  
 CAGAGAGATG GCAAGGAGAC AAGCTGTC CAGACAGAGG GATGGGAGG

SEQ ID NO:628: (Length of Sequence = 310 Nucleotides)

TTTTTTTTTT TGAGACAAGA GTCTCACTCT ATCACCACAG CTGGAGTGCA GTGACATAAT CATGGCTCAA TGCAGCCTCG  
 ACCTCTCAGA CTCAAGTGAT CCTCCACCT CAACATCCA AGTAGCTGGG ACTACAGGAG AGCCACCATG CCCAGCTAGT  
 TTTTINACTTT TCTGCAGAGA TGGTGTTTCT CCATGTTGCC CAGGTGGTTC TCGGAAGTCC GGGGCTCCAG CGATCCTCCT  
 GCCTCAGTCT CCCAGAGTGC TGGACCCACA GGCATGAGCC ACCACACTCA GCCCCAAAT CCATGATTTT

SEQ ID NO:629: (Length of Sequence = 443 Nucleotides)

CGCAGAGCAG AGGGTGGAAA GGCAAAGAGT ACAAGTGAGC GAGCCCTTTT TGTGATGGCG TTGATCTGTT TACAAGGGGA  
 CTGCCTAAAC ACTTTCCATT AGCCCCACT TCCCAACACT GTTCAGTGT TGCACTTAAG TTCCAACAC ATGAATGCTG  
 GGGACACAT TTAAATTAGA GCAGTGATGA TCAGAAAGTT ATTGTTGGGA AAGGAGGTTT TATTTTAACT TAAGTAGCTT  
 GAAAAAGCTC TTCAAGGAGT TGATACAAGA ACTGAGATTT GAATTAGAGG ACCGAGTAAA GTGAAGAATC TGCGGGCAAA  
 GTCCAGGCA GAGGGAAGAG CAGGAAATGA TTCATCAGTA GACTTGCTCT CCCATCTCG GCAAGGGCTA TTTACATTT  
 TCTTCCACTC TCTTCTCAG CACATCTCCA CCTGGGTTTT CTC

SEQ ID NO:630: (Length of Sequence = 263 Nucleotides)

TGGATGTGGT GAAAAGCGAA CACTTATAGA CTGCTACTGG GAACGTAAGT NAGTACAACC TCTATGGAAA ACTGTATGGA  
 GATTTTTTTAA AGAACTAAAA GTATATCTAC CATTTGATCC AGCAATCCCA CTGCTGGGTA TCTACTCAA GGAATAAG

TCATTACATC AAAAACACAC CTGCACACAT ATNNTTATTG CAACACAATT CACAATTGTA AAGATATGGA ACCAACCTAA  
GTGCCCATCA ACCCAATGTA GGG

SEQ ID NO:631: (Length of Sequence = 221 Nucleotides)

AATTTTINACA TATCAGTAAT TGTTTTTATA ATTTGTGGTT TTATGAAAC ATTGCTATGC ATTTATTAGG AAAAAGCTGAA  
TTTCCCAACA GGTGAAGTGA AAAGTATTTT TAACTATAT ACATAATCAA GATCCTGCCT CTACGGAATT AGCTAAACCT  
AAAAATGTTT GCATTAATGN ATAAATTCTT CCNGCAATCC TTGGGCCNGN TCTGGAGGTG G

SEQ ID NO:632: (Length of Sequence = 344 Nucleotides)

TGTGATGGAG ACAATACTT CAGTATTGGG ACCCATGGGA GGTGGTCTCA CCTTACCAC AGGACTAAAT CCAAGCTTGC  
CAACTTCTCA ATCTTTGTNC CCTTCGTCTA GCAAAGGATT GCTACCCATG TATCATCACC AGCACTTACA TTCTTCCCT  
GCAGCTACTC AAAGTAGTTT CCCACCAAAC ATCAGCAATC CTCCTTCAGG CCTGCTTATT GGGGTTTCCAG CTCTCCGGN  
TCCCAACTT TTGGTTTCAG AATCCAGCCA GAGGACAGAC CTCAGTACCA CAGTAGCCAC TCCATCTCTT GGACTCAAGA  
AAAGACCCAT ATCTCGTCTA CAGA

SEQ ID NO:633: (Length of Sequence = 378 Nucleotides)

GGTCAGACCT GAAGCCGGCA CAGCGCTGTG ACTGCCAAG ACCCCACTG TAACAACAAC CCAGCTGCCA CCTATTTCAC  
TCAAGGCCCC AGGCTCTCC AATTAGCAGG TAGTGAAGCC AGCCAGGCTT CTNCTCTCC CTTCAGTCCA GTAAGCTCCC  
CTGGTCCCTA GATGCATTCA AAGGTGCTGT CTGAGAGCCA GGGCTCTCAG TCATAAACCT TATAAATCTA CCTGGNGTTC  
TGTTCTACCA TCGTGTAGCT GGCATGAAT CCACCCGGCA AATCCCTTCC CACTNTCCCC TCCCTCTTN CCCAGGCAGG  
GTAGTCTGTT NCCACCTACG ACGTCATCAC AGTCTCATGC GGGATTACTG CCAGCTTC

SEQ ID NO:634: (Length of Sequence = 287 Nucleotides)

ATCAGTGGTC TACCACAGNT TAAGTAACGG GTCATATTG GAGTATCACA CATCTCAGTC TTGTAGAAAT TAGGNACAGC  
AATTAGGAGT CATGCACATA TANGAGATGT AATCCCAACC TTGACTATA GCCTACTCTT GINTTTTACA GAAAAGACTG  
TGGNGGAAGA AAACCCITTA CCTNTTNTT CAGGGAGAAA CINACANCAC TCANCTGCCT GGCAGTGAAG ATNTGGCATC  
CAGTCCACTT TACCATCAGT GTTTAAGGAA ACCATCTCTG GTAAGC

SEQ ID NO:635: (Length of Sequence = 226 Nucleotides)

TTGGGATGAT GCTTTTATTA AACGGAAGCG TCCAAAAGG TCTGAGTCAA TGGTGGAGAG GGCAGTCAGC CCTGTGGCAT  
TTCAGGGCTC CCCACCGATA GTATCGGCA GTGCINACTG CAATGTGATA GAGATAGATG ATACCCTCGA CGACTCCGAT  
GAAGGATGTG ATCCTGGTGG AGTCTCAGGA CCTCCACTT CCATCCTGGG NTGCCCCCTC CCTCA

SEQ ID NO:636: (Length of Sequence = 367 Nucleotides)

AACGCAATAA AAAGACAAAT TCCAAATGG GCAAAGATC TGAATAACA TTTCTCCAAA GATATGCAAA CAGCCAATAA  
ATACATGAAA AGATGGCCAA CATCAATCAT TATGCATTGC AGAAATGTAA GTCAAAACCA CAATGACATA CCACGTGCT  
CCCCTAGGN TAGCTACAAT CAACAAAATG GACAGCAAAA AGTGTGGTG AGGAGTAGAG AAATCTGAAC CCTCATGTAT  
TGCTAATGGA AACACAAAAT GATGGAGCTA CCATGAAAAA CTGCTTATCA GTTTGACCTC GGGAGTTAA ACACAGAAGT  
ACCACATGAT CCAGCAATTC CACTCCTAGG TATATACCCC AAGGACT

SEQ ID NO:637: (Length of Sequence = 384 Nucleotides)

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TTCAATAAAA TTTTACTTAA AATCTGTAAC GCTAGATATT GACTATCCCTT AGTTGAGTCA CTGAGGTTTA AACACAATGG  
 TAAGTCTTAA AGTCTGCTAT TTACAGAGCA TTGAATCTGT ACCAATTTGC AATAGAAAGC CTTCAGTATG CAAGAAGTTT  
 GCATGGGTAT TAAGAACACA GCCTAAATAA GGCAATTTGAT CTAATCTGCA GGAAGAAATTT TCTTCCCCAA AACAGAATTA  
 TAAAAGCTTA CTTTAAACAG GAGGCAGAAT AATTCCTTTTA GGAAACCAAT TCATTCTGTT TCTACTAACC TATACCATCT  
 GAGGAATTCT AGGGAGGATA ATAAAANTCT CGTGATTCC ACAGCAAAT TACATACCCT AAAG

SEQ ID NO:638: (Length of Sequence = 409 Nucleotides)

GAAATTTTTC ATCAGCTCTT GTTCTCTCTC ATTCTTTTTC ACCTTGTAGA TTTATCCCTT TTTCTTAATT TATTCTCACT  
 TAATGGGATT TCAGGAGCAT ATTGACTAAG TTTTCATTTT TACATGTATA CTGGGGAGTA TGACATAGAC ATCTCTGTAC  
 TTAGATATTA CTGATGTAAG TCTACTTTGA ATCAAATGAA CAGATGTTTA AAAAGTATTG TNCCTCAATTG TTTTAATGAT  
 TTCINCCGTG GAGTTGGGGT GGTGCTGCCC ATCACCAACT CAGGACGGGT ATTTGAAAT ACCTGGGNA AATTGTAAAC  
 ATGTCTGGGA AAACACTGCA GGATATTTTA ATGGGCAGA GGGGTCAAGG GGATGGATTA ACCATTGCGG AAATGTGAGG  
 GACGGGTCC

SEQ ID NO:639: (Length of Sequence = 197 Nucleotides)

GGTTCTACTC ACGGCTCAAG AGCATGGCTC AGGAGGAGAT CCGCAGAGAG ATGGACAAGA TNATCGAGGA CCTGGAGCTC  
 TCCAACAAAC GGCCTCACT GTGTCAGACA TTGTCGGGTG GCATGAAGCG CAAGTGTACC GTGGCCATCG CCTTCGTGGG  
 CGGCTCTCGC GCCATCATCC TGGACGAGCC CACGGCG

SEQ ID NO:640: (Length of Sequence = 398 Nucleotides)

GAGAAGGAGT TTCGCTCTTG TCACCCAGGC TGGAGTGCAA TGGTGCGGGC TCGGCTCACT GCAACCTCTG CCTCCCCGGG  
 GTTCAAGGGA TTCTCTGCC TCAGCCTCCT GAGGAGCTGG GATTACAGGC ACCCGCCACA CACCCAGCTA ATTTCTTATT  
 TCCAGTAGAG ATGGGGTTTC ACCATGTTGG CCAGGCTGGT TTTGAACTCC TGACCTCAGT TGATCTGCCT GCCTGGCCT  
 CCCAAAGTGC TGGGATTACA GCGGTGAGCC ATTGGCACAC AGCCTTATCT GCATTTTCAA ACGGGCCAGT ATGGATGGGT  
 TTTACACTTA TACTNGAAAG GTCATCCTT TNAAAAANG AACCTTTAA ACCATTAAT ATATATAAAA ACTATATT

SEQ ID NO:641: (Length of Sequence = 402 Nucleotides)

ATAATTTTNA GCAAATGAT ACAAACACTNT NTAAACCAAG TAGAAGATTG GTAGTTACAG TGGAATCGTC AGGGAGTACA  
 GGGCGGCCAC CACTGGAGGG AGCTGAGGCC CTGGAAAAGG AGTCTGATTC TMTGCAATTC TCTCTCTGCT TTTNTTCCCA  
 GCCCCGTAC AACCGAGTTC ACGTGGGGGG CCGCAGTGCA GCCCCAGCGG TGGCAGCTCT TGGAGTCTGT CCGTTTAGTA  
 TGTTTCCCCC ACGAGCGTCG CTGGGTGAGT GGCCTGGAGA GCTCCCGGTG TTAACATTC GATCCFAGAC CGGGGGGACG  
 TGTCCTAGG TAAAGGCCAT TGGGTAAACA GAGTAGATCA GGCCATGGCA TTGTCTGTC CCCTTTCACA GCAATTAAGG  
 GG

SEQ ID NO:642: (Length of Sequence = 395 Nucleotides)

CTTCAATGAT GCAATTOGAT TAGCTGTGTC TTACAAACAG AACTCCCAGG ACTTCATGGA TGAGATTTTT CAGGAGCTCG  
 AGAACTTCAG CTGGAGCAG GAAGAGGAGG ACGTGCCAGA CCAGGAACAG AGCAGCAGCA TOGAGACCCC ATCAGAGGAG  
 GCGGCTCTC CCCACAGCTG AGGGGCTGGG GCTAGGGGTG GGTGGAGCCC TTTTAAATA CCGTCCCTT CAACAATCT  
 CCAGCTCTGA ATGGAGAAAC TCTCTAGENC ATCCCTCTT CTACCTCCTG CAACCCACCC ATCTATTAG GCTNCCACAT  
 TCTAGGGCCC GTGATACAGG GGATGAGGGT CAGCAACCAG CAAAACCTCTN GGACTTGTG GGAAGAATTT TCCCC

SEQ ID NO:643: (Length of Sequence = 325 Nucleotides)

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GGTATCTTAA AGCCTTTCAG GGATTTCAAT AGACACATTT CTTTAGCTGA AATCTATTCT CTCAGAAACT TACCCAACT  
 TCTTAATAAT GINCAAATTC TAAGAAAGAT ATCATGGCTA CACAGCACCA GGNAGAGCAC ATTATTTCTC TTCACAATTC  
 CCTTGCATAG CATCATGGCT TCTAAGGGC TTTTAAGTTT ATTGCTTCAA CTGATTCTCA TAAAATCTCT GAGATGCTAT  
 CTGGAAAGTA TTATTATCCC CAGTTTCAG ATAAGGCAAC TGAGGTCTAG ACTTGCTAAA AAATCACACA ACCAGGTAAG  
 TGGGC

SEQ ID NO:644: (Length of Sequence = 373 Nucleotides)

CTTCACATCA GCAGCCGAC GAGGTGACTG AAAATCCAAA ACAGAAAATT GCAGCAGAAA GCAGTGAAAA TGTGATTGT  
 CCAGAGAATC CTAAAATGAA GTTGGATGGA AAAGTTGACC AAGAAGGCAA TGATGTAAAA ACAGCAGCTG AGGAGGTACT  
 AGCTGGTAGA GACACATTAG ATTTTGAGGA TGTACAGTT CAATCATCAG GCCCGAGGGC TGGTGGTGAA GAATTAGATG  
 AAGGTGTTGC AAAAGATAAT GCTAAAATAG ATGGTGCCAC TTTAAAGCAA TCCTNGAAGG ANCCAGAGGA GCGAAGGATG  
 CAGATCACTG CACCCGTACC CCAAAAATTG GAAAGTCCCC TCACAGGCCA TTT

SEQ ID NO:645: (Length of Sequence = 310 Nucleotides)

TTTTTTTTTT AAGACTCAAG GTAATGAAA CTATGAGTAG AATAGTAAGG TGTGACAGGG GACAAATAAG TAGATATAAA  
 ACTATGCTGC AATATTTTAG TTATTAAAGC TGGGAAATAT GCAATGTAA GTAGTGCTTG GAACCAGAGA AGGTCTATA  
 TTAGCTGTT CTCTGTAGC TAAATCTGAC AAATTGAAAA ATATCATATT CTCTGCTCTA GGTACATTTT ATGTATATTT  
 TGACAGCATA TCAAATATAT GANACATTAG GTTAAATAAA TAAAATCCA GTGGGATAAA CTATATGGGG

SEQ ID NO:646: (Length of Sequence = 362 Nucleotides)

CTTGGGATTG CTAGATCAGT GTTTTAGACA GGAATGCCAA GGCAGAAAAG AATCACATAT CCAGGACCAC ATAAAANCTG  
 GAGTGATGT CATAACAAAT TINCTCTGT GCCTAGAAGT TTTATGGCTT TGGATTTTAC ATTGATGTTT GCAGTCCATT  
 TTGAGTTACT TTTGTATCT GATATGAAAT ATACCCAAGT NCATTTAAAA AATAAGATTA TACAGTTGTT TATGGAATGC  
 ATTTATGTAC ACGGGTAATC TGTTTTGATT TTGTGTGAT GTTAAACAT CTTATTATA GTATTNIGTA AGAGTAGGTT  
 AATATTGACC TTGGGCATTT TTAACCAAG GGGGAATTT CC

SEQ ID NO:647: (Length of Sequence = 226 Nucleotides)

TTTTGGCGTC AGATCTGTAA GTTATTTGC TCAATGTACG ACAGCTACAT AATGNCCTAC ATTCATGATA TTCCATCACT  
 GAGGAACTG CTAAAGATGG TCGTGTGTG AAATAATTCC TTAGAGAAAC ACGGAGCTGG AAAAAATAATC ACTGATTAGA  
 CCTTAAAAAT AGTTCACTGC ATAACATGNC AAAAAGCACA AAGGCTCATT CAGAGAACAT ATTGT

SEQ ID NO:648: (Length of Sequence = 198 Nucleotides)

AACTAAAAAG TTAAACTTTT TACAAAACAA CAAGTTTTCC TTAAATTATG ATTTGTTATT ATAAAANCTA GTAAGAAAAA  
 ATTCCACCAC ATGAAAGCAT TINCTAAAAT TCATACCCCC GTACCTATTT TTAANTACAG TTGGTAAATT GATTAAGCTC  
 TATTINCATT TTGANTGATC ATCGGTTTTA TTTTATTT

SEQ ID NO:649: (Length of Sequence = 337 Nucleotides)

ACATCTGCAG CCATATATGA GTCCCTCAT GAGACTTAGC AACAAGGTGT GTTTTAATGT GACAGTGTGT CTGATGTGTC  
 CCCAGCACAT TGGGACCACT ACACAGTGT ATTGTACAT CTGCTGAGTA ACATTGAGTG TGTGGGTAAAC TAAAGCCCTC  
 AGTAATTATT TTAATTAAATG TTTTCAAGCT TAATCTGAT CTGTACTTG CATGATTAT TATTCCTTGT GCTAAATTCT  
 TCAATGTTCT TGCCTTGATT GATCTGTCAT TATCTATCAC TTAATAAAA TANTAATNC CTTTAATTAA GTCATGGTTA  
 AATGAGGGAC TTGTGTT

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SEQ ID NO:650: (Length of Sequence = 286 Nucleotides)

GGGTTGAAAG GAAAGGTGAC AGGAAAGATG TGTTTAGCAT CCATGAGCAG CTGGGGAGAG TCTTTCCTGT CTCGTAAACG  
CATCTGAGAA GATTAGGAAA AAAAATAAAC AGAGCATCAG TTCCTTGAAT CTAAAAGACT TTNITCTACT AAAATTTCTA  
CCCTCAAAT CTCAACTAAT GAAGANTGTT TACTTTTGTT TTAACCTCAC TTCATTTTCC CAATTAATA TTATCAAAAA  
AGTTAGTGCA TTGTAAAATA AGNTAATAAA GGNTAACACA TTATCC

SEQ ID NO:651: (Length of Sequence = 360 Nucleotides)

GATAATGTAA ATTTTIGCTT CTGGGCTTGT CATCAGGATT GCAATTTTNA GATTAGTTT GCTAATGT TGGCCTTTGA  
AAAATTATAT AACTTGGTT TGTTTGGTT TTCTTAAGTC AAAACAAGGA AATAAAATCA CATTGCTTT CCAAGAAAAG  
ATAATGTTA AGTGGTTGT TAGTGTGTTG TGCTTTGGG GGTGGGAGG GGTGTGTGGA ATACACAAAC ACACACACAC  
AAACACACAC AGTCTATATA TAANCITATT GGAGCCATCA CTATATTTTA AGGAAAATGN AAATAATCTA TTGAAGCTTT  
AAAATTAGGA ATTTTGTATT TAAGCTAAGG AGCCTATTTT

SEQ ID NO:652: (Length of Sequence = 353 Nucleotides)

GTTGGGGNN CCTGTAATCC CAGCTACTTG GGAGGCTGAG GCAGGAGAAT CGCTTGANCC CTGGAGGCAG AGGTTGCAGT  
GAGCCGAGAT CGAACCCTG CACTCCAGCC TAGGTGACAA GAGCGAACT TTGCGGCAT TTACTCTC AAAAGATTTA  
ACGCAATTAC AATCAAAAA CACTGTTCAT ATATAACT TTTTCACATG GAAATAAAT GGTGGTTTAA GGTTCACAT  
TCCTTGAAT AAAATTTTCA TTATTAGTTA CAAATGCTA AGACAGATTG AGGTCTCAA GAAAGANCTT TGAGGAAAT  
TTATGGTTTT AAAGGACTT TCACCAATA TGA

SEQ ID NO:653: (Length of Sequence = 224 Nucleotides)

AAGACAGGA NTACTTATT CAAAACCCAT CACAGAAATG GACAGCTTGG GTCTGTAAAC AAGCATTCAT GTTTAGNGC  
ATAGGTCAGT AATTGTATAT GAGAGCATAC ACTGCTACAT ACAAATTAAC TGNTCAGACC ACACTTTTC AATGTTTAA  
ACAGNATAAG CTTCCCTGTA AAAGCAGCAC CTTTGTGAC GNITTAACIT TAGTATTCCT CTCC

SEQ ID NO:654: (Length of Sequence = 353 Nucleotides)

GTCAACTCTA TTTTCATAT GAATTATTAG ATTTGGTGCT GTCTGTGAA GTAACCTGAT ACGATAGATG TGTTAGTATGA  
ATTTTGTTCA CATGGTTGTG CCTTGGCAG AACTGCAOGT ACCTGAAATG GTTCCCTAAT TTTTTCTAG TATTACTATC  
CAACACTTCC TCTCATAATC ACTAGTGTAT TGTATAATTG TTAAGTGTCC TTTATTCATA TATTTAAAT AAAAGAATAC  
TCTGGTAGGA TTTTGAGGGC CAATAGTGT TTTCCACTGT TTGAGGTATT AGGAGGGCTA TTTACTGATA CCTGTAGTGC  
CTTCCCATTC TGGTTTATCA TGCACCTCTA AAT

SEQ ID NO:655: (Length of Sequence = 365 Nucleotides)

GAAACTNACT TCACATTTCT CCAGGGAGGG ATGCTTTGGA AAAACTGCTC AGTGAGATGA AGCACAGATC TGCTTTTINAT  
CCCTTTGTGA CCTTTTAA GACATAAGGT ATGTTTTGAC ACTGGAGTAT ATATGAGGGT TGCTAACGTT TAGGTTGAAA  
GAGCTGCTGT TGTCCACAGC TTATTTATTT NCCACCCATT TTTGTCTCCT GGCTCATCC AGTTACATTT CCTGGGATAT  
GTTTTTGGAG GTTGTCTAGA TCACGGCACT AGAGTCCCTT TGGGTTTCTC CTCCCTCTC TGTCTATTG GCCTCGCCCT  
TGACAAACAT TCCCCACATT CACAACCAGG CCTTTGGCTA AATGT

SEQ ID NO:656: (Length of Sequence = 372 Nucleotides)

GTCAATGATC TGAGACCAGC CTGGCCATCA TGGCAAAACC CTATCTCTAC TAAAAATACA AAAGTTAGCT GGGTGTGGTG  
GGGTGCACCT GCATTCTCAG CGACTTGGGA TGCTGAGGCA GAAGAATCGC TTAAACCTGG GAGGCAGAGG TTGCAGTGAG

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CCGAGATCGC TCCACTGCAC TCCAGTCTGG GTGACAGAGT GAGACCTTGT CTCCAAATA AAAGAAATTT ACTGCAAAGG  
 GATGTTGCAT TTCAGGTGAA TGTATGTAGC CTTTCAGAGG CCGGGCTATT TATTAGATGT ATTTTATAAC TGAGGGTTCT  
 AGGTAAACAC AAGCCAAACA GATCCACCAG AAGCCTAGAG CTGTGGACTC TT

SEQ ID NO:657: (Length of Sequence = 334 Nucleotides)

GGTGTGGAA AAAAAACCT CCAGATAAGA TTGTGCCTGC TTCATTTTCT TGTGAGGCTG CCCAGACAAA GGTACTTTC  
 CTGATTGGGG ATTCTATGTC ACCTGATTCA GATACTGAGC TTCGAAGTCA GGCAGTGGTG GATCAGATTA CCAGACATCA  
 CACCAACCA TTGAAGGAAG AAAGAGGGGC TATTGATCAG CATCAAGAAA CTAAACAAAC AACCAAGGAC CAATCTGGAG  
 AGTCTGATAC ACAGAAATG GTTCTGAAG AGCCCTGTGA ACTTCCTGTG TGAATCATT CAGACCCAGA AAGCATGAGC  
 TTATTCGACG GATA

SEQ ID NO:658: (Length of Sequence = 286 Nucleotides)

ACAAACCAAC TGCATTTCTT TCTGGATATT GTTGAACAAA AATAGCATTC AGTTTACCCN CTAGTGCTAA CAGAAGNENC  
 TCAAGCTGTT CCCCCATCAT GGGNGCAGCC CTTAACAGAG GGCTGCACAA ATCTGCAGTG CTGCTCTGGG GAAGGCINCA  
 AAGCACTTTT TTCCAAGAA GGGATGCTGT TCANGTCTGT TAGGGGAAGC ACACCGNCTN TGCCTGGGCA CAGATGAAGT  
 GCCCTTCAAG GCAATCATCA TCTTTTTTCT AATAGGGAAG GTTTGG

SEQ ID NO:659: (Length of Sequence = 321 Nucleotides)

GGTCTTTATA GTTTCCGAG ACAGGACTGA AACTCCCTGC CTCAAGTCA TTTTCTAAG TAGCTGGGAC TATAGGCTGT  
 TTCTTTTTTT AAAGGAAGGA TTTTATGTT ATCATGAAGG AAAATAA ATTTGGCTAA CTFAAGAGT TATTTATCAG  
 GAGACACTAT TAAAAAAGG CAAATCAGAA ATTTGGAGAA ATTTTATA ATACTGATAA TAAGACAGAA TTGTACCCTG  
 TAACCATAAA TATGTAGAAT TTCTACCATA TCAATAAGGT AAGATTTCT GTTGCTCCAC ATCTCTTGC ACGGTTGGGT  
 A

SEQ ID NO:660: (Length of Sequence = 302 Nucleotides)

TTGTGTAAGG ACATAATGTT TTGACTGGG GATCATGTT GGCTGATGTA AATATTAATG CCAAATAGG AGCTAGGATG  
 AAAGTAACAC TGTAATAGT AGTAGAATTT ATTTCATATT AAAATGTGTC ATGACGTAAT TTTTATGGCT TGGCTCAAGC  
 AACAAATTTT AGAGTGCACC CTCATTGATG CTAATCACAG AGACGTGGAT GTGCTGTTAC TGCTTTCTAA CTCGCTTAC  
 TACGTGGCCT ATTATGATGA TGAAGTGTAT AAAGTAAACC AGTATCAACG NCTAAGTCTA GG

SEQ ID NO:661: (Length of Sequence = 249 Nucleotides)

AAAAAAAAAA ACTCTCAAGG GTCTAACITT ACCCATCATA AAATAATTTT GGTGCAAGGG TAGTGGCACA TTTTATTTAT  
 TTGGGATACC ATGCAGATGC AACCTAGCCC CATTCTTTAT GCAAAGTAGA TTATCCGTGC ATTTCTTCTG CATTGNTAGT  
 GAATCCTTAC TGGGNGAAC TCATTCCATT TGGCAACAAT CTTTAATGGN CAGGCAATAT ATAACATTGC TGAAGTCTCT  
 TAGCACTAA

SEQ ID NO:662: (Length of Sequence = 340 Nucleotides)

TTTTTTTTTG GCAGCCTTGT AAGGAGAACT TCACCATTTT CCAGCACATC CCTATGTGTG CGCCTATTTT AATGCACCTC  
 TCTGAAACAG AGACCTTTTT GTTCACAACC ATAATAAAG CTGGAAAGTC AGTCTTCAGG CAAGGCGAGG GAGGAAAACA  
 TCCCATTAGA ATTTTTCAG GAAAGACTTA TGGNAAAAA TATCTCTCTC CCACCTCCTT TTATCCCAT GAGACACAGT  
 TTCCCACTGT AATCAGGGTA ATATGCATTT NTAAAGINCTG ATATGTGATA CATTATGTG ATGSCAAAGA TAAGTCTGTC  
 TTGCATGCAG GGTACTAGAG

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SEQ ID NO:663: (Length of Sequence = 325 Nucleotides)

CACAACAATT CTATGAAATT AGCTGGGGAG ATACTGTCCT TATTTTTCAC AGCTGAAGAA ACCAAAGCTT TGGGAAGTTT  
GTGACTTCTC TGAGATCACA GCTGGTGATA GAAGGAGCTG GGACACGCGC TTGGGTTGAC TGGCTTCTGG TTTTGGTTCT  
CTGGCTTCTA GTGCTGGAAG AAGCCCTCTC TTCCCTTCT CTTCCTCAG TAGCATCTGA CTCCTTTCAT AAGCAAACAG  
CTGTATAAAC AAAGCCCCCA TTTTGGTCAA GCACAGGGTG AATGTGATAT TTGTTCCAC AACCTTATTC TNCCTCAAC  
AGCCG

SEQ ID NO:664: (Length of Sequence = 300 Nucleotides)

TGCTGAGAG AGATGATGTT TCATGGGTGA TGTCTCTGGA AGAGATTGGA TAGGACCCAA GCACAGAGCA AGAAATTGGC  
TTTAGGCAAG TCAGATTTGT CTATACTAG TTAGGAGTAA AGAGAAATGG ATGATACAGA TGCAGCTATG TTCGTAGGAG  
GGAAGTGGAG GGAATTTCTG TGTGATGGCT TTAGTAATGT AGGCAGCAAG GTCACTACT GACAGTGAGA GGAGAAATTC  
GGGAGGCTG GTCACAGTTT GAAGTAATAG GTCATGGGA GGCAGATGTT TGTTGGGTGA

SEQ ID NO:665: (Length of Sequence = 327 Nucleotides)

CAAATAAGAA CCCAGAGAGA GGGAGAGATT CACAGACAAT AGCTTAAAAA GTCTAGAAAT TATAGACGA TTGAGGTCAG  
CAAGAAACAA ATTATTCAAT ATATCCCTG AGGGCTAGAG CCAGACTTTC CCTATGATT CCAAAATTAC TTCGCAGTTT  
CATTAGGGTG AAAGGCAGTG CAGTCTCATG AGTTCAGAAA GTAAAGGTTG TTCCTTAAAA TTTAGATAGA CTTGACAACC  
ACTTAGGATG GCATTTTGGC ATTCTGTCCC TGCTCATCAA AGAAGTIGCT CAAATTTGTG GGNTAGAGGA ATGAGGAGCA  
AGAAGTA

SEQ ID NO:666: (Length of Sequence = 319 Nucleotides)

ATTCCCAAGG AGAGGCTGAG ACAGAGAGGC TTGAGCTGT TCCTCAGCCC CCTACCTAA CTCCCTCCCT ACTGTTGATC  
AGGCTGGTCT CTAACCTCG ACCTCAGGTG ATATGTGTGC CTCAGCCTCC CAAAGTGCTG GGATTACAGG TGTGAGCCAC  
CATGCCITGG CTTGGTTTGA TCTTAAGGTC TTTGTGTGTC TGTTCATCT GCATGAATAC ATTTNCTTCA TTTACTTACG  
TCTTAGCTTA AATGATACCT CCTCTTCTTT CTTACTGCCA TTATCTCCC TTGTCACTCC ATACTCAGAT TTCATTGCA

SEQ ID NO:667: (Length of Sequence = 288 Nucleotides)

GGTGGCAGGC TGCTTGCANT NCAAGCCAG GNGTTTCTG ATGGGTCAGG GTGGGGAGGC TGCACACCAC ACAAGGTCAC  
CCTACTCTAC CTCTACCCA CCTACCACA GCGCTGAGCT CACCACTCCC CCAGGGCATG GGACTCTTGA TAATTCCAAG  
TCCATGAAAC CCTACAATTA TTGAGTGGC TATGANTCCT TCTATGAAAG TACTTCCCCT GAGTGTGCCA GCGCTCAGTT  
TGAAGGTCCC TTAAGTCTC CCCCAATTAA CTATAATGGG GATATTTT

SEQ ID NO:668: (Length of Sequence = 212 Nucleotides)

TCNTTTCINT TTCTATCTA TCNCTTCAC CATGTGCTT CGGGGCTGG AACATAGTAG ATGCTCAATA AATATTGATT  
GAATGAATGA ATGAATAAT CINTTACAC CTCATGCT TCAAACAGG AAAGGCTAGA TTATTIAGAA GTCTGTGCGG  
GGATAATAAT NAGCTCAGTG GAAGCCCTCT AGTCTCACT CGAGTTTCTC CC

SEQ ID NO:669: (Length of Sequence = 281 Nucleotides)

ATCTTTTCAA CCTATCAAT AAGATGTAT GAAAGATTGG TTCTCTGTT TACAAGTAGT ATAGAATCTT TTTTGATCTT  
TGACTCTGTG CTGCCTATCT CATCAATGTT GTTGCTATTA ATATCTGTCC TTAAACACTG GATGTTGGGA TCTTAGTAAT  
GTTGCTGATA ATAGGATTTT CAGCAAACT TCCATATCCC TTGAAGATAT GGTAGTTTAT ATTACTATAT CGATAACAGT  
TTTGCTGTG GAGATTGAC TAGTTTAGG TGTTTGAAG C

SEQ ID NO:670: (Length of Sequence = 234 Nucleotides)

AATAAGTTG GGATATTGA TTGTTTCCTT TCTGATCTT TATGCTGACT GCAGTATCAG ATACCATTTT ATTGTTTAAA  
AATCTTCCTT TTTTFTTTT TTTTFTTTT CATTITGCTC TTTTGTGATT GTTTCAAAGT CAAGTTGATG GCCNCAAAAT  
TCCAGAGGCT AAGCAATGCA GAAGTTTCAT CTACTGGCAG CTAGTTTAT TTTTAAAAA TACATTAAAT TAGG

SEQ ID NO:671: (Length of Sequence = 252 Nucleotides)

CCTGAAATGT AAATTGTTTT TAATATATTT AAGAGCACAC AGAAGTCTTG ATTTATAAAA AAATAAATAT ATAACATGAC  
AAATTTACTG ATGATCCTGG GGCTCTGAGG TCAAACCTCTT TAAATGATCA GTGAAAACAT AAAACATCCA TGATCTGTTA  
ACACACACAG GGGCATATTC CAGTTGTAAA AAACAANTTC CTTGAAGGCT CAGNACGTAC AAAANTCAGT NTTTTNGGCA  
GAAAGCACAT CC

SEQ ID NO:672: (Length of Sequence = 366 Nucleotides)

CCATCCAAT ACTTACTCAA TCCTCTTGAA ATCTGCCTTT TGTAATGTAA CTGATAGGCC AGCGTTTTCT TTCACTGTGG  
GAAATAAAGG CTACTTGGTT GCTTTAGGGA GGGCAACAAT GTCAGCTGCA TAAGCAGCAA GAATATTATA TTTNATTACT  
AGTCCACCTT TAATAAAGAG AGAAACCTTA GGAATGGAA AGAGGTGTCT GTTTTATATT TCCTTTGCTT TTCAACCAT  
GTTTAGACAC TCTCCCTTCT AGTGCTTGA GAACCTTCAT GGAACCTCTG TTCAGTTCT TGACTCTCAG CGACANATGT  
GGAGGTCTTT GTGGTCTTAG CTCTCTAGGC CTGAGAATCA CATACA

SEQ ID NO:673: (Length of Sequence = 349 Nucleotides)

CCTCCCATCT TGGCCTCCCA AAGTGTTAGG ATTACAGGCG TGAGCANCCA CACCTGCCT GGTGTGTAC TCTTTTAAAT  
ACTAAGTTTT TAATGTTAAA TGCTGCTTTT AGATACACTG TAAAATACA CCTATCAATG AGTTTTTTTA TTA AAAACAT  
TGCAATTGTA CTAGNCTTTA AATACTAAGC AATAATTCAG GCTTCAATGT TGGTTTATAG TTTTCTCATT TCTTTCATTT  
AATACCTCTG TAAATGAAG CAGTTACTTC CATTTTCTG AGGTGAGATA AGTGCCCTGC ACAAATGTTA TAGGNCCAGT  
AAGTGAGGAC TGGAGCTCTG GATCCTAAT

SEQ ID NO:674: (Length of Sequence = 256 Nucleotides)

GCACTTTGGG AGGCCGAGGC AGTTGCTTCA CTTGAGGTTA GGAGTTTGAG ACCAGCCTGG CCAACAGGT GAAACNGTN  
TTGCTCTAAA AATACAAAN TTAGCCGGGC GTGGTGTGTC ATGCCGTGAG TCCAGGTAC TCAGNGGCT GAGGCGAGG  
AATCACTTGA ACCCGAGGTG GGGCAGGNGG AGGTTCAGT AAGCCAAGAT CGCGCCATTG CACTCTAGCC TAGGTGACAG  
AGTGAGACTC CATCTC

SEQ ID NO:675: (Length of Sequence = 292 Nucleotides)

GAAGTCATTT TAGACTCTCA ATTTTAAATT AATTTTGAAT CACTAATATT TTCACAGTTT ATTAATATAT TTANTTCCTA  
TTTAAATTIN AGATTATTTT TATTACCATG TACTGAATTT TTACATCCTG NTACCTTTC CTCTCCATG TCAGTATCAT  
GTTCTCTAAT TATCTTGCCA AATTTTGAAA CTACACACAA AAAGCATACT TGCATTATTT ATAATANANT NGCATTCACT  
GGCTTTTTTAA AAAANTGTTT GATTCAAAC TTTAACATAC TGATAAGTAA GA

SEQ ID NO:676: (Length of Sequence = 392 Nucleotides)

ATCAAAGATT GCAAACATTT ATTTTGATCC TGGACTACAG TGIGGGGATC ATTGCTATGT TGGCTTGCTT TTNCTATCCA  
AATCTGAACC CAAAGTGCAG CCTGGTGTAG CCATGCAGGA AGATATGTGG GATGCTGACT GGGATTTGCA TCAAAGCCTG  
TTCAAGGGAT GGACAGGAAT AAAGGAAAT NCAGGTCATA GATTGAGTGC TATATTTGAN GTAAATACAG ACCTTCAAAA



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AAATATAATA TCAAAAATCA CTGCTGAGCT CTNCTGGCCT TCCATACTTA GCTCACCOCG GCACITGAAA TTTCCACTTA  
CTAATACAAA CTGCTCCTCA GGAAGGANGA GATTACTTTA GNAATCCTT GCAGGATGTT CCTGTCTATG GT

SEQ ID NO:677: (Length of Sequence = 333 Nucleotides)

CGCATGCTAA TTTAAAGATA TACAGGAAGN GAAAAGTAGG AGTTAAGTTG GATGTTGTTA GAAGTTGGAT GTTAGTATTA  
CCTTCAGGAA CAGATCCCCA TGGCATGTCA CAGGCCTTAA TTATATACCT GGCTTTCTTA TTGTCTCCAC TTTATCATGA  
GGACAAGGTC TTGGTTTCAT GGGAGGAACT TCTCCATTGA AATAAATGTC TGCCATGTCA GCACCGTTTG TNCCTCAGT  
TTTAATATAA TGGACCATAT ATTAAACATN ATTAAACATA TTTTAAATN TGGTGTCACT AGGTAGATGC CCCAGNCATC  
CTACTTCCCT CAC

SEQ ID NO:678: (Length of Sequence = 359 Nucleotides)

AAGGAGACAA AGAGTAGATA TGGTATCTTG GGGACAAATG GCACATGAAA GCAGATTTGG TGCTTCTTTG GTAAATGGTT  
TGATAACCAA TCCCTAGGAG ATAAAGTTAA TGTGTCTTTT TTTTTTTTTT TTAANCGAAG GTCCCTTACT GGTCTGCTT  
CCATGAGTAG CCGTGACCAG GGGAAAAGGG AGAGTTTTTT TTTTTTTTTT TTTGAGAAAG AGNCTCACTC TGTCGCCAG  
GNTGGAGTNT AGTGGCATGA TCTCGGCTCA NINCAGCCTC TGCTCCAG GTTCAAGCGA TTCTCNTGCC TTAGCCTNCC  
GAGTNGCTGG AATTTCAGGC GCATGCACCA TGCTGGCT

SEQ ID NO:679: (Length of Sequence = 339 Nucleotides)

GGTGGCACAT GACTATAGTC CCAGCTACTT GGGAGGATGA GGTGAGAGGN TCACITGAGC TGGGGAAGTA GAGGTTGCAG  
TGAGCTGAGA TCTCACTACT GTACTCCAGC CTGGATGACA GAGTGAAACC CTGTCTCAAA AATAAATAAA GANAGAAAGA  
NTATAAATAT TTTGTATCAA TTTTCAGCTT TTACAGTCAA TGAACTTAAG TCTTAATTTT GGTACAGAA TTAAATATTA  
ATATTAACAA TCAAGGCAAT GTAAAAGTAA AGTACAGTTG ACTGAAGCTG GGACACAGAC GGNAAAGAGA GTGAATGAAA  
AGAAGGATAC TAATATTCT

SEQ ID NO:680: (Length of Sequence = 356 Nucleotides)

CTGTATAATC AGGTATATCA CAAAGTCTAT AGTCTCTGAG ACATGGGTGA GTAGGTGTGA GCACCTGGTG AAACAGGTCA  
GAGGAAAAGC AAGTTGGCGT TGGAGTCAGC TGTCAAGAGA TAGATCCGTG ATGGTATCGA GATCACTACA GACAGGTGCT  
GGTCACCTAG TGTGTCCGC TGAAATTTGG AGGGTTTAAAT TTTTAAATCCA AATACCATAG AAATGGATAT GAAAAGATGG  
GTGACACATG CTGCACGTTG GGAAGTGGGG ATGACCAGGT GCTTAGTTGC ATGGGAGAGG CCACAAGTGC TTGGCAATGT  
TTTCGTNGAC TTAGCCTCTC ATCTCAGGAA TTAGCT

SEQ ID NO:681: (Length of Sequence = 345 Nucleotides)

GGCCTGGTGT TTGGCTGAGG TGCCTAGGA CCCCTGGCCG TGGTGTACTG GATGGCATCA GTTCTGATGG GTCANATGTC  
CATTCTAACA GGTGGTGCT GGAGAGGGAG CAGTTGTAA ATATCTTTAC TATCTCCCCT NCTCCGGACA CCTAGATGCC  
CAAATATACA GCACGTAGTA TGGAGGCAGG CCCTTTTGAT TGACATCAGA ATCAGGTTTG CAATGGAATA GGAGCTTTCC  
TTCCTCCTGT CACTTTAGCC CCAGGCTCCA CCTCANAGTC TGGAAATGCTC ATACCTATGG CAGGTGACCT TGTGTAAACAG  
NTTGGGGTTA ATGCCATTCT GTCT

SEQ ID NO:682: (Length of Sequence = 302 Nucleotides)

CTCAGACATA TCTTTTTTTC TCTAGCATG ATGCCACCC CAAGGTACTT ACACGTCTTC AACAACACCT TCCGGACAGC  
TTCGTGGTAT CTGTGTGGC TATTCTGGTG CAOGGAATAA TTCCATCTT TTGAGATAAT GGGGGGAAGC CTAGTAGGCT

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CTGGTTCCTT CTGGTCTGAA ATTAGAGTAG ACTCGTTCCTG AGTACTTGGC AAATGACTAT TTGATTCTCT GATTCCCTGG  
NCTCCATGCT CACCAGATGC ATAGCAGGGA TCTCTCCTAG NCACTCACAT CCAATTTTCA GG

SEQ ID NO:683: (Length of Sequence = 329 Nucleotides)

GATTTTAAAT AGTTAAAACA TTTTITTTAA TCCATAAGTA ATTCTTACTC TACTCATTTA TACACACATA TACTCACATG  
TACACAGACA TACCTACACA CACACTTATA AATACATGTA TACACAGAAT ATAGTAAGGT CTTTATATCCC TTTTCAATGA  
AATAAATATT GTATTCTATA TTTAGNATAA ATAATGTTGA AAAAGTGATT TTGGAGAAAG GTTGAAATGA TTGAGTCTTA  
AGTGTGTCAA TGTATAATCT ACCCCTTTCT AAACATCGTG TTTTAAGTAG TCATCTTACT TCAGAAATTA GAGGCTCAAT  
GTGTTTAGG

SEQ ID NO:684: (Length of Sequence = 281 Nucleotides)

AACATGGCTG ANTTGAGATT AACTGCCAT GATACATTGN CTGACAGCAC TTCACATTTT CCTGAGTTG GGGACAGAAA  
TCACACTGCC CAAATACATT ATCTGATGGC TCCTCATGTT TCCCAAAGT TAGGAAAGGA GGTCTATAT ACATACATGC  
ACAAGTGCAT ACACACACAC ACACATACAC ACACACACAG TGCTAGATGA GATGTTGANT GNCATAAGGA AATGAAAGTN  
CCATCTCTCT NTTCCTACC CCTGCATCT GTCCCTTAT A

SEQ ID NO:685: (Length of Sequence = 324 Nucleotides)

ATTTTAAATA ATTTTAACT AGCTACAAA TGTCATCAC TTCACAACT GACAGAGGAG ACAGGAGGAA TTTAATATTA  
CATGCTATAA TGATATTAT CTCACAGTT ATATTTCATT CATTTATATT ATTTTITTA AAGGTTTCTT TATCAGCTAC  
TAAACATCTC AGCAATTTGG TGTGCATAGC TCTAGATTAA GCAACAAAGN ATTGTACTGA TAACAAACCA CAGGGGAAAT  
GGTGGTTAGT AAGAGTCAGC CTTATAAAAT TTACATCCAC ACTGTTTTCA CAGCAAGNTT GCTCTCTCCA AAACGGTGGN  
CATC

SEQ ID NO:686: (Length of Sequence = 380 Nucleotides)

CGAGGAGGAG GAGGAGAAAA TTCCCCCAGA TTGGGCGAGG CCCGCACCCC ACATTCCGTC CTGTTTIGAG AGGAGGAGGG  
AAGAGAAATA AACGTGGCAG CGCATAGAAG GCCAGCAGGG AGACTGCTTT CCAGACACCT CCGGCCACCA CAGCCGTTCA  
CCCCCGTTT TTTAGTCTT GGAAAAGGAA TTGGGCTCTG TTTTCTTTT GGGCTCTGTG CAACTNCAGC TACAGTGGAA  
AAAAGCAAAC TGCTCTTGAT CCCAGGCCCT GCCTAAGCCT CAGCAGAACT TTTAAGCCTA AACTTNAAGA GCCTCACCCG  
GACGAGCAGG CATNCCTTAA CCTTAAAGCA ATCCAGTTTC ACGGCCTGGT TCAGTGGAAAT

SEQ ID NO:687: (Length of Sequence = 305 Nucleotides)

GACACTTCCC CTCTTTTATG GAAGCATAGT AAGATTTTTC CTTTATGGCG ATCATGATGG AGAAGTATAT GCTACAGGAG  
GNGAGGTTCA AATTGCAATG GAACCTCAGG CACTATATGA TGAAGTAAGA NCTNTGCCAA TTGCAAAGCT GGATAGGACA  
GTGCTGAGA AAGCTGTTAA AAAATATGTA GAAGATGAAA TGSCAAGGCT CCTGATAGA TTGTCAGTAA CTTGGCCTGA  
AGGAGATGAA TTATTGCCTA ATGAGATTAG GCCTGCTGGA ACCCCTATTG GTGCGTTAAG AATTG

SEQ ID NO:688: (Length of Sequence = 390 Nucleotides)

GAAGTCATAA GGCCTAAATA TTAATCCAGT CTGTGACAAC GACAAGGTGA ATACAAGCCA GTCTCTACTT CTCTGGGCCT  
CTGTTTCTG CACTTATAT AAAGATTGGG CAAGATGGTC TAACITAAAT TTTATGATTC ACTAACTTGA TTTTGTATGG  
GGCAGATTTT NCTTCGATGA AATATTACA AATAAGNCAC TCAAATAAAT CAGCAATGGG GTGCAGATGA GGACTACCGT  
TTCTACAGCA AAATATGGGT GAACTCAGTA AGTGTAGGNA CACAGAAGTT AATGCTGACC TCTTGCATAG CATGTATGGG  
ATATTAAATC ATTTCTGCC TTCCATTTCA GGGGTGAGGG AGGAACAGCT GTTCCTGAAC TCTTTTAAGG

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SEQ ID NO:689: (Length of Sequence = 315 Nucleotides)

GATTTAAGTG TTAGCATTTT TAAACTTGAG ACTCTAACAG TAAAAATAAA GTAATCTGAA ACCTGTTTCC ATGGGTAAAA  
CACTCTGCCT GGTATTCTTG TACACAAAAT TTACTAAATA TGIGAATATC ATAAAATGAA AATATCACTC CCTTCAATTT  
CTTTGGCCTT CACAAATCA ATGTGACTAT GATCCTTTT AATAATACTT TCAATGACAT TGTGCTTCTT TAGAAAAATC  
ACTTAAGTTG TAGCATACAA TAGTTAACAT TAGTCTTTT ATTGCTATGG TATATGCTAA TTTTITTAAG AGGGG

SEQ ID NO:690: (Length of Sequence = 291 Nucleotides)

TTAAAATACT CCATATATTT NAGAAGCAAT TGAAAATGCA TCCATGATG TNATTGAGC GTTACTAGAA ATTTATTTAT  
ACAAATCCAT ATTAATGTGC TAATAAGTGA CAAATATATA TATAGTCATG CACTGAATAA TGATGTTTTG GTCAACGATG  
AACTGCACAT ACAATGGTGG CCCCATAGA TTAAAATAGA NCCAAAATTT CCTATGGCCT AGTGATGCTG TAGCCATCAT  
AATGTGGTAG TGCAACCCAT TACCTTTTCT ATGTTTAAAT ATACAAATAC T

SEQ ID NO:691: (Length of Sequence = 451 Nucleotides)

TTGAGCATCC GGAATATGGA GAAGTAATTC AGCTACAGGG TGACCAACGC AAGAACATAT GCCAGTNCCT CGTAGAGATT  
GGACTGGCTA AGGACGATCA GCTGAAGGTT CATGGGTTTT AAGTGCCTGT GGCTCACTGA AGCTTAAGTG AGGATTTTCT  
TGCAATGAGT AGAATTTCCC TTCTCTCCCT TGTCACAGGT TTAAAAACCT CACAGCTTGT ATAATGTAAC CATTTGGGGT  
CCGCTTTTAA CTTGGACTAG TGTAATCTCT TCATGCAATA AACTGAAAAG AGCCATGCTG TCTAGTCTTG AAGTCCCTCA  
TTTAAACAGA GGTCAAGCAA TAGGCGCCTG GCAGTGTCAA GCCTGAAACC AAGCAATACC GTCATGTTTC AGCCAAGCCC  
AGAGNCCTAA GGTTTACAAA CAACTATGG NCCGGAACCT CCTCAAGTTC T

SEQ ID NO:692: (Length of Sequence = 363 Nucleotides)

GATTTTINTG TTATTGATAT TAGAAATGTT TAAAATTAAG ATATTAAACAT TTCATGAAGC TGAGTGGTGA GCACACCAGT  
TTTATATCTT CTCTATATAA CTTTGTGTAT ATTGAAATG TTTTCTCATA AAAAGTATTT AAGCAAGTTT AGGAAAGAAT  
ATTGATAAAT GAAATCTAGA GACCATCAA AGCCAATTT ACCATCACAA AGTATAATTG TGTTTCAAAT ATAATTGAAA  
TTGTGTGACT GTTGCAATAT CTCTTTTGTG TTGTGTGTTA TGAAAGCATC TTAAACAGTT GCCTTTTCAA GCTGTTATCT  
TTGATANTAA CATACTTAA CCTAACATTG TGGACTTCTG TTA

SEQ ID NO:693: (Length of Sequence = 269 Nucleotides)

TTAAGGGTCC CAAGACTGCT CTAACAACAA CACCCATTT CATAAATATG GNTCAATAAA CACTTATTCA TTCTTTATAA  
TTAGACTCTA TTGTTAGAAT TGTTTLAGGT TTATAGAAAA ATTGAGCAGA TAGTACAGAA GATTGCCATA TACCCCTCAC  
CCACAGAAAT TCACAATTA CCCTGCGATT AAAGTCTAAT GTTAATATGA TATATTAGT ACAAGTAGTG GGATTATATT  
GATACATTAT TATTAATTAA AATCCNCAA

SEQ ID NO:694: (Length of Sequence = 330 Nucleotides)

GGCATAGTCA CTTCCAGACA TGGTTCCTC TCCATGTGGA GTAGGTCAA GTCTCCGTCC TCCCTGGCCA GGTGGAAGCT  
CCAGAGGGAC ATGTTTCAGC TTAGTACAAG GTGGCTGACA CTAATCCTCT GTAGGAAGAG GCTGGCTGGA GGTGAGGGCG  
CCCCACTCAG CCGTACCCA TCAAGAAGTA TTCAGAAAGG ATGTCTCTGG CATCCACAAG ACTACTGGGC GAACCACT  
GCAAAAATGA AAAGTAGCGT ACACAATTTA AATTGGTCTT AAACAAGCAA ATAATCCAGC CATTTGGTAC TCTGGGAATC  
TAGAGTGCAA

SEQ ID NO:695: (Length of Sequence = 344 Nucleotides)

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CACGTGACG GATGAGTGA TATTTCTTTG TACCTGAGC TCTTCATCC TACCTGGTG GTCAAATGTG AGAGCAAGTG  
 CTTTGGGGCT CAGAGGGCAT CACTCCAAGC ATTCTGCATG GAGTCTGTTG TGGTGAATGT NCTTGCTGGC ATCTTGATCA  
 AGGACTTTGT CATCATTAGC CATCAAATGC TTGTTGGTCC TTCTCAACCC TGTAAATGTTG ATACTTAAAA AACTGGAAAC  
 ATCCTGACAG AAACAGTCGA GAAAGTGGTT GTGTGAGCTC TGGTTATCGC ATTACAGTTA AAGTTGGCAG ATAGTTCTG  
 TATTCAGTGC CCCATCAAAA ACAG

SEQ ID NO:696: (Length of Sequence = 324 Nucleotides)

CTTGAACGTG GCAGATAAGC ATTTTGATAT GCTGCTGGAT TCAGTTTGCC AGTATTTTAT TGAGCATTTC ACATCGATGT  
 TCATCAGGGA TATIGGCCCTG AAATTTTGTG GTTGTGTTG TATCTCTGCT AGGTTTGGT ATCAGGATGA TGCTGGCCCT  
 ATATAATGAC TTAGGGAGGA GTCCCTCTTT TNCTATGTT TGAATAGTT TCAGAAGGAA TGTTACCAGC TCTTCTTTGT  
 ACCTCTGGTA GAATTTGGCT GTGAATCCAA TAGACACAAT AAAAAAATGA TAAATGGGAT ATCACCCTG ACCTCAGAGG  
 AAAT

SEQ ID NO:697: (Length of Sequence = 341 Nucleotides)

AAITTAATCAA TCAGCCATTT TGGTGGCCGA AATTTATAAG GCAAGTAATA CTTTGTAGTT CTTTGATAGA CACCATGATC  
 AGAAACATAG TCTCTTTCTT AAAGGGAAAA TAGGAAGTCT TCTGAGTCAT AACAGATGCA TGCATAAATT TCTCTGAGTC  
 TTCATAAGAA ACACAAGCAA GATTTACAG AGGCAGTGA ATTTGAACTG AGTCTTGAGA AATAAGCAAT ATCTGAACAT  
 GTAGAATGCA AAATAAAGGA TAAGCAAGTG CTAATGCCA GAGGGTAAAT ACATATTAA TANCCANTAA CCAATTGCTA  
 CTTGTGTTTC TTACTACTAGA A

SEQ ID NO:698: (Length of Sequence = 317 Nucleotides)

GCAAACCAGG AGAAGCAGAA GAGCAGGGTA AACCTGGGT ATAATTGTG TAGACCCCA TGCTCCTTT AGTCTGAGTT  
 CTGACATAAT TAACGTCTA TGAGATGTAC TGGCCCTTC CTCTTGTCT TTTGATGCCA CCTCACTAAT GTAAACAAAA  
 CATTCATTTT TTCATCCTAT TTTTCTTAC AGCTGCTTAG CACAGTCTT ATGAAAAAAT GAAGCCTTGA AAATGGTATA  
 TCCTCTCGAC AAAGCTAAGC CTGACAAGTT GGCTGCATTA CCTAGGAATT AGAGAAGAGC AAGGGCAGAT GGTGGGG

SEQ ID NO:699: (Length of Sequence = 385 Nucleotides)

ACCAGGAGAT GGAGGTGCTC TAGACTGTGA TGCTGGGAAA GGATTGTGGG CTAGAAAAAG GGCTCCCTAG GGCCGGCATA  
 TGGGCCACTG GGTGGAAGAG GGGCTCTGAG ACCCTCACCC TGGAGCAGGT CATCACCCAC ACCGAAGAAT GAAGCGTGAA  
 TTCGGTCACG CTTAAAATGT TGAATTGTTG GCAAAAGCCC AAGTTAATGA AATAGCATGG AAAATGGATG TGATGAGATT  
 TTTGAATGT AATTAGATTA ACATTGTCAC TAGTTATCAG TCTGATATAT CTTATAAATC AAACGTTGGG TTGATTTATC  
 TTTTATCACT TCTAGGNCCT TACTCCTAAC AGTAACTCAC AAACCCAGCC CCAAATCAGA GGCTT

SEQ ID NO:700: (Length of Sequence = 315 Nucleotides)

ATCAGTTGGA TTTGCAGAGG ATTGGAAGGC AGCACCAGGC AGGCTCAGAC TCACTGCTGA CAGGAATGGC TTTCTTTAGG  
 ATGAAAGAGT TGTTTTTTGA GGACAGCATT GATGATGCCA AGTACTGTGG GCGGCTCTAT GGCTTAGGCA CAGGAGTGGC  
 CCANAAGCAG AATGAGGATG TGGACTCTNC CCANGAGAAG ATGAGCATCC TGGCGNTTAT CANCAACATG CAGCAGTGAT  
 GCGCCAGGC TCTTCAGGNT GGGCCTGATC CCNCACTGGT GCTTACINTG CTGACTGTGT ACTTATCTTC CCCAA

SEQ ID NO:701: (Length of Sequence = 387 Nucleotides)

GGCAGGAGAA TCGCTTGGC CCGGGAGGCA GAGGTGTCAG TGAGCCAAGA TCGTGCCACT GCACTCCATC CTGGGCAACA  
 GAGCGAGAGT CTGTCTCAAA AATAAAAAAT AAAAAAAA GGTAGGTCTT TTCATCATTG TGTTTTCTAG CATGTAGCAC

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TGTAACCTCC ACCTACTAGT AACTGAAAAC ACGCATGTGG GAACATTGCA CAGATGGATA GATGCAGAGA TGAAAGAAGG  
 AAAGCTAAAA TATTTNCCAC GTGAAAACCA TGCATCCTGT TCAGAAACTA ATTCTGCCTT CACGCCTTCC AGGAGCATGG  
 GAGGGGTGTC GTCCCTGNCCT TTTTGIGGAT GAGGGGGACC ACATGGTATT TCTACTGAAA GAGTTTT

SEQ ID NO:702: (Length of Sequence = 397 Nucleotides)

CATCAAAAA AAAAGGAGCT AACTAGATGC TGTCATAAG AGACTCACTT TAGATCTAGA GACACAGGTT CAATGTAAAG  
 GGATGGAAAA ACATATTCCC TGTGGAAATC CCAATGAGGG TGCTATGGTT TTGCATGTGG TTTGTCCCCA CCAAACTCA  
 TGTTTAAAT TAATTGCCAA TGTAATGGTT CTGGGAGCCT GGGCCTTAAG AGATAATTAA GATGGATTAA TGTCTTTCCC  
 ATGAGACTGG GTTAGTCGAG ACTCTGCAA AAGCATGTTG TCGTTAAGTG GGTCACTCCT CTTTGTCTTG TCTCTTTTAT  
 ATACACTTCT TTCCCTTCT ACTTTTCCAC CCTATTATGG AAGCACCGTG AAGCCCTCAC CAGATGCCAC CACCATG

SEQ ID NO:703: (Length of Sequence = 374 Nucleotides)

ATACAGGGTT AGACCAAAGA GGAATTCAA TGAGGCTGA TGGATTTATG GACCAGAACA ACAGAGGGGT CTTGAAGGAA  
 GGAAGATATA GAAAAGGCAA GGTGTGGTT AGAGAGGAAA TCCAGAGTT TTAGCTCTGG GAGGTGTAAT AATTTCAAAA  
 GAATAAGTCC AGGCCTGGCC ATGACATGGG AAGCTGAATC TCTGCAATGT TTTTCAAAT AGCATAATGG ATATCTTTGA  
 CTCCTACCCT GAAGCCAGAA AATATTAAAC TTGCATGTAT AATCATACAA ATGTATGCAT ACCTATTTAT ACATACATTT  
 ACATATTTTA TACTTATGCT TTCATATATT CTACGTGAGG TACAATATAC TOCA

SEQ ID NO:704: (Length of Sequence = 422 Nucleotides)

GGCAATGACA TAGAGATGAT AAGAAACAAC ATGGTTTGGT AGAGGGAACA TTTGATTTAG ACTCTGCCCA TTTTGTAGCTG  
 TATGACTTAC ATAAGTCATT TTGTGTCCAA GCCTCATTTT CTCCCATATG AAAAGTGAAG GGGTTGGATT AAATGACTAA  
 AATCCCCCTC CAGCCCTATG AGCCCAATGT ATTATGATCT CTGCTTTGTT TCCTTCTTAA GAGGCTTCCT ACTATAAAAT  
 GTGACCTATT TACATTTTAA GTTGAAGTAG CCCACAATA TGAATAATCA NTTTAGATTT TCCTCATCTC CTTTGGGAGA  
 AATTAAATTC AAGCCTCTAT TCATTTGATG TTTTACAACA AGCTTCAAAG TTGGGCCATG GTTCATTCAC AGTTTTGATA  
 TTTTGAGGAC ACCAATAAAA AG

SEQ ID NO:705: (Length of Sequence = 229 Nucleotides)

GCTGCGGNTC ATAACAGCTG GACTCAGCC GNTGACAGAG TCTTGATCAG TCCTCTGGGA ACTAGACGTC AGGCTCACAC  
 CACTGTCTGC GCTGATCTGG GNCCTTTTCT CCTCTGCTC ACCAAGGTCA AAGACAGGTT TGATTACTTC AGGCCTCTGT  
 TTTTCAAAG NTTTTTGCTT TNNCACTTCC TGGTGCTGT TCCACAATTC AATAGATGCT ATAAAATTT

SEQ ID NO:706: (Length of Sequence = 255 Nucleotides)

GAGGACTGIN TACCTCAGTC CTCTCTCTAA ACTCCTCAGC CTCCCAACAG GGGCCTCCTC ACCTGGGTTT TGAGTGTGTA  
 CCCCTTTTAG AGAGTGAGAT GCCACCCGGG CAGCACTCGT TAAAGCTGGC CAGCACGAGT GACTAAGGGG AGAGAGCATG  
 ACATAGACCT GGGTGGCAAC GGGGACCTCT GGAAGCAGGT GGGAGTAACA NAGGAGAGGG CAGTNGAGGG TAGAGGAAAA  
 GGACCTCCAG AGGTT

SEQ ID NO:707: (Length of Sequence = 324 Nucleotides)

CCGNGAGTGT GCCACTGCAC TCCACCTTGG TGACAGAGTG AGACTCCGTC TCCAAAAACA AAAAAACAA AGTTGAACTA  
 TAAACTGAAT TCCTCCCAAG GTTAGTTTCT CCTATGCCCT GGAATGAACA AGGACAGCTT GGAGGTTAGA AGCAAGATGG  
 NGTCAGGCCA GATCTCTTTC ACTGTTAACA TTTTCTCAGT TATAATTTTT GCAAATGTGG TTTCACTCCC TGCATCCATA

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ATACCTAGAA ATTTTGATAA ATACTTGTTA AACAAACAAA AATAAAACAT CCACAGCAAG GANTCGACTA TAAGGCGTTG  
GTGG

SEQ ID NO:708: (Length of Sequence = 325 Nucleotides)

GGGCTCATAC ACAGTTTTAT TTCTGTGA TTTTACAGAC ACTCCATCCT GCAAGCCCAT TCCCTTGGA AACCAGAAA  
GAGTGGGCAC AGTGCTCCCT AGAGGAATAG AGGGGACAAG ATGGCTGCCA GGGAGAGGGC AGTTGAGGCA CTTAGGGATT  
TACTCCGGCC CTGATGGAAG ATCTGGTGCC CAGGGTAGGG GGAGAGGGCC TGGGCTGGC TGGAGCCTCC TAGGTATTTT  
CCAGAAGCCC CTTAGGAAC TGTCACCTGG ACTCCAGCAC CACCCCTCGT CATGTTGTCA CTTCTGTGG TGGCGGAGC  
GCAGG

SEQ ID NO:709: (Length of Sequence = 264 Nucleotides)

GGGCCCCGTT GCATGAGGCA CTTGTCAA ATGAGCAGAT ACGTATGAGC ACTGAACTCT TGAGTGAATC AACCAGAACT  
AAGACCCAGA TCCAGCACT CAGGAACCTG CTCTGAATTT CAGTTTGACA ACAGAGAAGT AGAATATTTT TAATTAGCTA  
ATATATATAC ACATTTTTTA ATCATCCAA ATTACAGGCA AATCACTTAA GGTCCCCAGC ACTTTACGNT GNAAGGTCAG  
AGAGANCCCC ACAAAAAGG TGTT

SEQ ID NO:710: (Length of Sequence = 366 Nucleotides)

ATTTTTATTA TATACATATC AGTACTCACA ATACGTTGCT TATTTAAGAT GGCTGTTTAT AAGTATAAAG CAGTTTGAGC  
AACACTGATT GTGCATTATT GTACTTCAGA TGAAAAATCC TTACATGCGG AATCAATGTC TTTTAAATTT TCAGATAAAG  
AATTTNCATT TGAGNGACA TACAATTGTA AGTGCTCATT TTTTGTCAAT TTTAAGACAC CATTATGTTT AAGANGGATT  
AATTTNCCA TAAAATTACA AACACCTCC ATGCTTGAC ATTACATGG AAAGGGCAGC ATAACCATTT AATCATCCAA  
ATGCATATCA GAGCAAATC CTAGGCCTT TAGGTGTGAG GGTGGA

SEQ ID NO:711: (Length of Sequence = 216 Nucleotides)

GAAAAGCAGA AAAAAGTGGG GAAGATTTTC TATCTGAAC TTGTGAGCTG GAGAATTACC ATTAGTAGCC CACTAATAGG  
TTATGGCCGA TGAGTCCCTT CATAACACAC TGAGAGCCAC TTTTGACACT CCCAGAAAAG GCAGGTTAAC AAAACCCCTT  
GATGGAAGCT TAGACCCTCA TTGCCAGTG TACCAAGCC TCTTTGAACC TTGCTT

SEQ ID NO:712: (Length of Sequence = 276 Nucleotides)

ATTTTTTTCC CATAGCAGT ATCACTCTCT CATGTGTAC CTGCTACACT AGAATTATGA CCCCTAAGAG GGAAGAGACT  
ATGTCAGTAT CATTGATTCT NATTAACACC ATTATTTAGA ACCATGCTTG GCTTAAAGTA GTAGCTGCTC AGTAAATATT  
TATCTATGIG TGAATTTTTA AGINCTTCCT TTATATTGAN TTAAATTAG TCTCTGTGT GCAGCAGTCT GGGTTGTCT  
TATGTTGAAA TACTTATGTA GACTTCTACA TACATT

SEQ ID NO:713: (Length of Sequence = 354 Nucleotides)

AAACTTTACA ACCTGCACAT TTGTTATGCA TACTAAATGG TGTGTTAAAA TTAGGGTTTC TTTGCCTCTC TACACTACAC  
TAATCTGCCT AAAGGTGGTT GTTCATATT TATAATGCTA ATTATCATAC CTACCTACTT TAAATTTTAG GTAGAAAATT  
ATCTGATTTA AATACAAACA TATTTTCTC ACATTGAGTA ATATGCATAA TGTAGTTCCA AATGTATTTT ATTACTATAG  
TCACAAATATC CAACTAAAAA TTACGCTATC TAGAATTGTA CCANCCAAAA TCTCGTATTG GCAGATCTTG ACAGGCTGGA  
CCTGCAAGNA TGTGCTTGG AATTTTAAAC CCAT

SEQ ID NO:714: (Length of Sequence = 349 Nucleotides)

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CAGTAATTCT CTTACATCCT TCCCAAAAAT CAGTGTCTAG GGACTAGTTG ATCTGGATGA GTTATACATG ATATTTGACT  
 TTNCATAAGT AGTGGGAAGGT TTCACTAAGT AAAGATCTGA GTTTCCTGGT ATCTGACGTT TGTATACAGA TGGTGTCCAT  
 TTGCTCAACC AGACAGGAGT TAACCTGTAT TAGAATTGTT TTTNCTAAAG TNATGTTACC TGAGAAATTA AGGACTGCAC  
 CTGGTTTAAAT GTTGCTTCAC TTATCCCACC CTACAGAGAC CAGCAAGGTT CTGCCAGGCC TCGAGCATCC AAGCATGATT  
 TTCCTGTGAC AAAATCTAAA AATCCAACC

SEQ ID NO:715: (Length of Sequence = 302 Nucleotides)

ATATTTGAAA AGATCTTCAC CAAGATATA TGGATAGTAA GTAAATATAT GAAAGGTTTT CACTGTTAAT GATTAAAGGA  
 AATGCAATCT TGTACATGAA TGTTTATAAC AGCATCATT ATAAGAGCCA AAAGGTAGAA ACAATCCAAA TGTTTCATCA  
 CTGATGAATG ANTACACAAA ACATAGTATT ATCTATATAA TGGAATATTA CTTGGCCATA AAAAGAAATG AACTGGGCCA  
 GCGCAATGA CTTACGCTG TAATCCCAGC ACTTTGGGAG GCTNAGGTGG GCGGACTGCT TT

SEQ ID NO:716: (Length of Sequence = 314 Nucleotides)

GTATTTTTAG TAGAGACGGG GTTTCACCGT GTTAGCCAGG ATGGTCTTGA TCTCCCTACC TGTGATCCG CCCACCTCGG  
 CCTCCCAAAG TGCTGGGATT ACAGGCGTGA GCACCTGCGC CCCACCCCAT TTTGGTGTGA TCTCAGCTCA CTGCAACCTA  
 CCCCTCCCAA GTTCAAGTGA TTCTCCTACC TCAGCCTINT GAGTAGCTGG GATTACAGGG GTCTGCCACC ACGNCTGGCT  
 GATTTTCCCA TTTTINAGTG ACACGCAATT TCACCAGGNT GGCCAGGCTG GTCTCGATCT CCTGACAAG AGGG

SEQ ID NO:717: (Length of Sequence = 279 Nucleotides)

ATAAAAATGC TACAGATTTT TGTATGTGA TTTTATCA TGCAATTTCA CTGAATTTGT TTTTCAGTTA TAACAGTTTT  
 CTTATGGAGT CTTTGGTTTT TNCCAAATAC AAGATCATAT CATCTGCAAT CAAGGATAAT TTGACTTCCT CCTTTCCAAT  
 TTAGATGTCC ATTATTTTTC CTCCTGTCTG ATTGCTCTAG CTAGGATTTT CAGTACTATG TTGAATAACA ATGGTGAAAG  
 TGGGTATCCT TGTCAATTC CAGGTCTTG GAGGAAAGG

SEQ ID NO:718: (Length of Sequence = 161 Nucleotides)

AAGAAAAAAA CATAAATAAT ATTAGAAATG GAAAAGTTAT AAATCAACTA CAGCAAGGNT TTAAGACTAT TATGAAACAA  
 ACCAAGTAGA AAGTAGATCT GCCAAACAAA AAAGGAAAGA NACTGTTTCT TTCATAAATA ANTGACAATG GGGGAAAAAG  
 A

SEQ ID NO:719: (Length of Sequence = 220 Nucleotides)

GACAGAATTT TTTTTTTTTT TTTTTTTTGA GACAGAATCT CGCTCTGTCA CCCAGGCTAG AGTGCAATGG CGCAATCTCG  
 GCTCACTTCA ACCTCTGCTG TCACAAATAA ACATCAGTAA GAGCCAGCAG TTGCTCTAGG ATCTCAGTCA GCAAGCTTGG  
 GGGCTGTGAG GAAACCAGCA GTCACCTGTT TCTCCCTCTC CCAGCCAGG GCTGACCCCT

SEQ ID NO:720: (Length of Sequence = 347 Nucleotides)

AGAAATGAAA GCTACATTAA CGAAAAAGGA ACTTAGGAAT GAGGTCAITTA AATATAACTA ACTACATTTT AAATACGGAT  
 ATCATATATT TCCIGATTAG TATCAGGTAA ATATCTAGAC TCCATCTCTG AATTCCGGTC TCAGATAAAA AGGTCAGAGA  
 CAATTACAAG GAAGATGCTT CATATTATCA GGTCAGTATA TACCTAATTA TGTGCACTGG AGAGTAATTT ATTCTTCATT  
 ATCAATTGTA AACATTGTTT TTTACATTT TTGTAGTTGT CCATAATGTA AGCTTGTGGG TTTGATTATT GTTTTCACA  
 CTGGATCCAG CTGGTTTAAA CCTATTT

SEQ ID NO:721: (Length of Sequence = 313 Nucleotides)

226

AAAAGATTTG AACAGATAAT TCATCCAAAA AAAATATGGG TGGGAAAAAA AGCACATGAA AAGATGCTCA ATATCATTAG  
 ACATTAAAGAA AATATAAATT AAAACCACAA TGCAATATCA CCTCGTATCT ATTAGAATGT CTAATATTAG CAAGACTGGC  
 CATATAGAGT GTTGGTGAGG ATGTGAACAA CTGAAACTCA TACACAGTGC AGGTGGAAAT GTAAATGATA CAATTTTTTT  
 GGAAAAGAGT TGGCTGTTTC TTCAAAAGTT AACATTACA TCTGCCATAT GNTCCAGACA TTCCACTCCT AAG

SEQ ID NO:722: (Length of Sequence = 266 Nucleotides)

ATCGTGCCAC TGCACTGCAG CCTGGGCGAC AGAGGAAGAC GCCATCTCAA AAACAGAAAA AAAAAAAAAA AAAAAAAAAA  
 AGTGCAGCTC TCTAATTGGG CTCTTTTACT TACTATTTAT ATAATAAAG CCACGTTCTT AGGCTGTATA ATGGGGTTAA  
 TCATAGTAAG TACCTTGTA AGTTACTGTG ATAACCAAAT AAGTGANCAT AAGTAAAGCA TTTTACATGT GTGCAGCTTA  
 ATAAGTTGGA GTTGTGACTA TTATTT

SEQ ID NO:723: (Length of Sequence = 370 Nucleotides)

ATTATTCAATG AAATAATCCA TGTAACATCA CTTAGCACTG AGAGTTAACA AAGGCAAATG TTACCTGAAT AGGAGGAAAC  
 AGAGGAAGAA CAACGAGGTC TCTTTTATCT ATGCTAAGCT TTGTCTGAAT AGGAGAGAAA TGTGTGGCCT GTTGGTGAAT  
 TTATTGCTTT GTGGTAGTAA TGGATTTYCC TAAAGCTGTT TCCCTCTGAT CATTATAAT CCTGTACAG CAAAGGACTA  
 TTGTCCTTTG GTATGAGTAA ATAACCCTGT TGGAAGCACC GCTTATCTTC AGACCACAGC GCATACTTCT TACTGGAAAA  
 TATAATGCAG GTGCCAACAC CCAAAGGGCA TGACCAGGGG TTCCCTTCC

SEQ ID NO:724: (Length of Sequence = 478 Nucleotides)

GGACACAACCT GAAGTGTGGA AGAAATGAAA GGGCGAAGGT GTGTTTTGAG AAGGCTCTGG AAGAAAAGCC CAACAACCCA  
 GAATTCCTCT CTGGACTGGC AATTCOGATG TACCATCTGG ATAATCACCC AGAGAAACAG TTCTCTACTG ATGTTTTGAA  
 GCAGGCCATT GAGCTGAGTC CTGATAACCA ATACGTCAAG GTTCTCTTGG GCCTGAAACT GCAGAAGATG AATAAAGAAG  
 CTGAAGGAGA GCAGTTTGTG GAAGAAGCCT TGGAAAAGTC TCCTTGCCAA ACAGATGTCC TCCGAGTGC AGCCAAATTT  
 TACAGAAGAA AAGGTGACCT AGACAAAGCT ATGGAAGTGT TTCAACGGGG TGTGCGGAAT CCACACCAA CCAATGGCTA  
 CCTCTATCAC CAGATTGGGG TGCTGCTACA AGGCAAAAGT AAGGCCAAT GCAGANTACA GGGGGATCTG AAGCTAGT

SEQ ID NO:725: (Length of Sequence = 356 Nucleotides)

GACAGAGGAG AATAAATGGA ATAACCTAGT TTTGTGAAAG ACTCACAGTA TCACCTGGTT TCTGGACAG GTTCGAGACC  
 TGGCTGTGGC TTGCTGTGGC CTTGAGAGCC ATCCACAGC AGCAATGCTG TTGGACCCCT TGGCTGGGAC CTTGAGGACC  
 CCTGCAACA GCACTGTGTG CCTAACCTGC TGGCATGATG CCCCTTINIT GACAGGGCTG CATAAAGGC CAGCGACAAG  
 TGGCAGGCAG TGACGCCAGC CTGGATTGTC TGAGGGCACA CGCCATGCTT CCTGCAGTGC CAGTGTCTTT CTNGGTCCAC  
 TTTGCAGCAA GGATAGATGT GGTTCTAGAT CCAAGA

SEQ ID NO:726: (Length of Sequence = 387 Nucleotides)

GTGGTAGAGT AAATCCTATT ATATCGAGAT ATTGGTCAGG CAAGAATTTT NCTTTTAAAA TAATTTATTG TAAATGAACC  
 ATAAATTTT NACCTTTGTG CCATCTTCTA GGCTATAAAA TAGTCTTATA AAGAATCAGA TGTGTAAGAG TATATGAAT  
 GTGGATATGG ATGTGGAAGA TCCATAACGA GGATGATGAA AGCACATTAA GAAGCTTTCT GATGGGTACA AAAATAGAA  
 TGAAGAAGAT CTAGTATTTG AGAGCACAAC AGGGTGACTA TAGTCAACAA TAATTTATTG TGCATTTTCA CATAACTAAA  
 AAGTATAATT GGGATTGTAA CAGAAAGGAT AACTGCTTTG AGGTGATGGG ATACCCCAAT TTACCCC

SEQ ID NO:727: (Length of Sequence = 348 Nucleotides)



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CCTTTAAGC AGCGGATCCC CTGGTCCCCA CCCCCAATT TATATTCATT AGGCCTGAGG TGGGGCCTGG GAATCTGGAT  
 TTATAAATG CTCCTCTATG ATTCCAATGC CAGTGGGTTT TAGACCACAT TTTGAGAAAC AGTGCTGTAA ACTGTTTCC  
 ATTTGCAGTG AAGGAAAATG TAGGGTTTGT GTCGTGAAAC TATGCAGAGA AATTGAATAG TATTINAGTC TAATCTTGCT  
 TTTAAATAAC ACGGAAATTT TGAAAGTCGG CTTTAGGGAG TTCCAGAACC TGTCCATGAA CAGCAACAAG AAAGATCCCN  
 GTGTGAAAT GAACACTGGT TGGTAAAA

SEQ ID NO:728: (Length of Sequence = 305 Nucleotides)

TGTTTATTA TAATCTTATA CAGTCTACAT AAATTGAACT TGTATTTAT TTGGGTTTCTG TTATAACATA GCATAATAAA  
 AATCAAGCA CTGGTCTCT GAAATAAAGC AGGCAATCAC CATTCAATA ACACACTTGA TTTATTTTGT ATAAAAGGGT  
 TAAGTTTACA ACTAACTTT TATAAAANGT TTAGCATGAA TAAGTACATC ATTACACTTT TGAATGCAGA AATAGACATC  
 TCTGCCACTA TACAAGAAAA CTCTAATTAA AGAGTTTACA AGGTTTCACT CAAATAGATA TATTT

SEQ ID NO:729: (Length of Sequence = 383 Nucleotides)

CAGACATTT ATTTTCTAT TTTCCATGAA GAAGGAGAGG GACAATTTTA GATTCACCAG TGTGCAGGAC AAATCTTAC  
 TTAACCTATA GAGGAGCAAA CTTTCTTCAA ACACATTACC AATACAATTG TAATACTAAG AATCAATACC ATAGTTCTCG  
 ATGTAGCATG ACTACAAATT GTCACAGTAG ATTTTGGATG ACTTTACCAT AGCCACACTT AATGAATTAT TATTNATATT  
 NCTATTTGTA CTTTAATAAA ACTATATTTT AAACTTTAAA ATTGTCTATT AAATTACTAA AGAAAATGAG TAGTTCCCAT  
 AATGAATCCA TAATGTTTANG AATTTGCTTT AGCAAATGAG GACTATATTC ACCTANGCTT TTG

SEQ ID NO:730: (Length of Sequence = 311 Nucleotides)

CTCTTTTATT CCTTTAACTG CTTAACAAAA GAAAGAGTCT CCAAAGTTTA AAAAACCTTT GAAAAATATA CAGCTTGATA  
 TTATTTACAT AAAATATGAN TCCAGGTTCC AATATCAAAC AAACATTGCT ATGTCAGAAA CACAGTGGAA GGCAGGAACG  
 TAACCTACTG CCTTTTAGAT GCAAAGACTA ATAGACACGT TCTCCNATCT CGACTATCTT NGTTACCTGT TATCCTCANA  
 ACATAAATTA TTANGGCACC TNGGAGGTG GATGACTACC GAAATGGNC TTCATACCTT CTGTATGATT A

SEQ ID NO:731: (Length of Sequence = 349 Nucleotides)

AGGGATATGC ACAGAATTCT ACTAAAATA CAGCAAATA AGAGAGCATG AATTACATAT CAAATTATTT AAAGCAAATA  
 ATTTACAAA TTCTGGAAC AGACAGAAAG CAGATGAGTC TACCAAGAAG GATAATAAAC AATGACACCA GAGAAAAACC  
 ACAACCTGAA AACTTAAGAA AACTGCCTAA GAGGTGTGAG CCAGAGCTCC CAGGAGCCCT ACAGTGCTCC AAGCTCAGAA  
 CTGGCAGTA TCAAAGTCAA GAATGCTATG GGGTAGCTAG GCCTCTTGAC TTTCTCTTCT CTCTCCATTC ATAGACAAGA  
 AAGCATATCT ACCTTTAGGT GGCTAGAA

SEQ ID NO:732: (Length of Sequence = 370 Nucleotides)

AAATTGTGTC CTCTAGCCTA GAAGCAATCA AACTCCAAT GGTGCTGCTG ACTGANCTAC GCATGGATAC GCCATTCTTC  
 TGAGGCTCT TAGACCAACC CCAGGAGGAG CCTGACTTC TGTTCCTCAT TTATGCCCC TTTTCAAGCA GGAAGTAGCC  
 AGAAAGATG ATTGCCCAA ACCACCTAAC AGCAGTTGGG GTGACGCTC CACAGGGGGG AAATGTTATA GGAGTTATTA  
 AGAAATATC TTAGGCAGAT AGAGAGCAA AGGGGTCTT GGGAAATTTT TGTTCCTTTT AAAGTAGCTG CAGAAATGTT  
 TCTTCTTAG CAGGAAAAGC CCCAGCTCTT TAAAGCTGGG GCCAGCAATC

SEQ ID NO:733: (Length of Sequence = 357 Nucleotides)

TTTTTGGTG TGTAGAGACA AGGTCTGCT ATGTACTAA GGCTAGAGAT CCTTTTAAAA TGTCTTCTG CTAGGTGTTT  
 GGGCCATCAG CTCTCCTTGG TTTCTCTCTC CTCTCCAGC TTCTCTGGAT TCCATCTGTT TCTTATACTG AGAAGTTTGC

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TACCTAGCTA GCCCTCAACC TCTTTGTTTT ATGAATGGAA AGGCTGGGAC CCAGACAGGG CAAGTGACTC ACCCAGTGTG  
ACAGAGCTGT TAAATGGCAG AGCATGATTG AATCGGGCCA TGACTACTTT CCTACATGAC ATATTGAAAC CAGTTTGAGG  
CCTCGGTTTC CTCTCTNGCA AAACAGAGAT ACTAATG

SEQ ID NO:734: (Length of Sequence = 374 Nucleotides)

TGGTGAAAGA AGAGAAGGAA ACCITGGTCT GCATGGCACT TGGTACTTTT GTATTGCCTC CATGCCCTCC ACTGCAGCTC  
CTGCCCTGCT CTGTGTGCAT CCTCATGAG ACTCAAGACA GATAACCTCT CCTTGCCCTT TCATGTCCCA GCCCTGGNTC  
TTGGACTCAA CCATCCATTG CATCCCCATG GAGGATTCTG CCACTCCTCA GGACTCAGGA GCAACCCAAG GATGTCCCAG  
GGTCACAGGA AGACTTGTG AGGGGACCCA CAGGGGTGCC CACAAATTAT CAGTCCATGG AGAAAAGTAG AGAGGGAGGC  
TCAAGGACCT CAGCACGTAA GGGACATTTT GAATTCTACA AGTCACGGTG GGAT

SEQ ID NO:735: (Length of Sequence = 348 Nucleotides)

CCCAGCGCTT GGAGAGCCAG CCTGTCAGGG TGGGCTGGGC GAGCCAAACT GCGTTCCTGG TGCAGGGCTT CCGGTCTCCC  
TAACAGACCT TATACGCTGA CCGGCGGCCG CCATGGCAGT GTCTCTTTGC TCAGACATCC AGGGACGACC ACATTGCTCC  
AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGCGAATCGT TTTCTCCGCG TGCCCTGTCA GCGCTCATG GTGCCAGAG  
AGGAATTTTA GTGCGAGCAT TCGGCTGTG ACGCCACCGA AATTGCCAGG NCACTCCAAG TCAGAAGGAC CACCAGGAA  
AGTCAGGAAG AGAACCACCC ATCAAGGT

SEQ ID NO:736: (Length of Sequence = Nucleotides)

ACACTCCTGA CCTCAGGCAA TCCTCCACC TCAGCCTCCC AAGTGCTGG GATTACAGGC ATGAGCCACT GCGCCAGCC  
TACACACACT CTTAATAGAA GAAATGAATA ATCAAAAAAT ATTATTGTG GAAAAATGT TTGAATCTTA TTTTAAAAAT  
AATTAAAGNT TTCAATAGGC ATGTTGAACC TTTTTCGCG TACTGTTTC AGCAATTGCA GTTGAATGAG TACAAAATGC  
ACCACAGAAT AGAGACTGCT ATCTACCCAA ATATTGCTGG TTGTTGAATC CATGGTAGGG AATTTCATG TATTGTTACA  
ACNGCTATA AATACATCCC AAAATATGTG TAGAGCTAAA ATAGATG

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SEQ ID NO:737: (Length of Sequence = 243 Nucleotides)

TTAATCATTC AAACCTCATT TTATACAACG AGTGCAACA CCACCTGGGG AGINTCTGAC TGATGCGTGG GAGGGCGGGC  
GGGGATGTCT NCAGCTATGA GTAGGGAGGA GGCGGGGAAG CCTGGGTGC TTCTCTCCT CCACTGACCG CTGTGTGTTT  
GTCCCAGAG GAAGAGCGGN NGGCACTCAG CCGGGGGG GATGGCAGAN TGGAGAGACG GACCTGCAGA AGTGGTGGCC  
AAG

SEQ ID NO:738: (Length of Sequence = 358 Nucleotides)

CGAGTCAGAG CTGGACAGCG GCGATGCCAT CTTTACATGG CCAGACCGAG AGAAGGGCAA ACTCCTGCAT GGTGAGAATG  
GCTCTGTACC CAACGGGCAG ACCCTCTNA AGGCCAGGAG CCGCGGGAG GAGATCCTGT AGCCACCTGG TCTGTCTCCT  
CAGGGCAGGG CCCAGCACAC TNCCTCGCCA GTCTCTCTAC CTCCCGAGTN TGCGGGCAGC TNCCTGCCA GCATCTGCTG  
GTCATTTGCG CCTGACAGTC CCAACCAGAA CCGCTNGGA CTTGAATCCA GAGANGTCT CCAGENAACC CCTCAACGAA  
GCTGTGAAAT GAAGAGGTTT CCTCTTTAAA ACTGGTTT

SEQ ID NO:739: (Length of Sequence = 400 Nucleotides)

CATTTCTGGC CAGGCACGGT GGCTCATGCC TGTAATCCCA GCACTTTGGG AGGCCGAGGC AGGCGGATCA CGAGGTCAGG  
AGATGGTCTA GACCATCCTG GCTAACACAG TGAACCCCTG TCCTACTAA AAATACAAA AATTAGCTGG GCGTGGTGGC

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GCGTTAGTAT TTCCTTAAAT AACAGGTTAC AATAGAAAGA TACTGCCTGG AAGTTATCCT TTTCATTTTG GTTCATTTTC  
AGTTTTTGT TATGATTAC ATAGCTGTTT AATTCAATTG CTTATAGTAC AATCCTGCCA TAAAGTATTA AAGCACAAGA  
TACCTGTTAT TCCCTTCAAC ATCTGCATTT TTTCAAGNTT TTATACTCTA TATCCACAGT ATGTCAGCAG TTCTTGACTG

SEQ ID NO:740: (Length of Sequence = 374 Nucleotides)

ATCGTCAGAT TCACCAAGGT TGAAATGAAA TAAAAAATGG TAAGGGCAGC CAGACAGAAA GGTCAGGTTA CCCACAAAGG  
GAAGCCCATC AGACTAACAG CAGCTCTCTC GGCAGAAACC CTACAAGCCA GAAGAGAGTG GGAGCCAATA TTCAACATTC  
TTAAGAAAA GANTTTTCAA CCCAGANTTT CATATTCAGC CAACTAAGC TTCATAAGTG AAGGAGANAT AAAATCCTTT  
ACAGNCAAGC AAATGCTGAG GGATTCTGTC ACTNCCAGAC CTGCCTTACA AGAGGTCCTG AAAGGANGCA CTAACATGG  
AAAGGNNATA ACTGGTACCA GNCAGTCAA AACATACCA AAATGTGAAA GGGA

SEQ ID NO:741: (Length of Sequence = 290 Nucleotides)

AATTATTCA TAATAATGTA ATAAACATTC ATGAACATAC CCTATCAAGC AAGAGCTAGA ACCTTGGCAA TCATTTCTTT  
GACTCCTCCA GTTTTGGGCT ATCATGATAT TCAGCCCCAA GTTCATCATT TCTGTTTTIN CTTCTATACA GGTTCTTTAT  
ATGTAATTTCT AAAAATCATT GGTATTTC ACTTTGTAAA AAGTCATTGT NCTATTTTCC CCACTAGTTC TACATTGCAT  
TCATATTGTT GTGGGTTGTG GTAATTCATT NATTTTGACT GCTGTATAAT

SEQ ID NO:742: (Length of Sequence = 274 Nucleotides)

TTAAGAGGAA AAGTATCTTT AGGAATTINT TTCTATAGAG TTCTTCATTA ACATTTATAC GAGTTTTTTG CTGAGTCAGA  
TGGACAGTTG GGTCTGATG CTTTTCCTT CCGGCTGCC AGGCTGGCCC AGGCAGTGCT CCCACCANTC TATGAGCGTN  
TCCGGGGCCG NGGATCTGGG CAGCATCCAT GGTCGCGGGG CCATCCCCAG CGGNACCACA AGGTNGCAGC GTTGNTCCAC  
GAAANACCGN CTTTCGCTC TGCTTCCCCA AAGG

SEQ ID NO:743: (Length of Sequence = 398 Nucleotides)

TGTCTTTGCA GTTATCTGGA ACTCTCGTG CTCTTTCAGG AGCTCTGGG TGTGCTGTAT ACTGGAGCCC GTGGAGGTGT  
GTGTGGAAG GTAGAACTCG CCATTGTCTAT GGATCCATTC CAAAGCCTGC TTGGCACTCC TCTCAAAGAC CAGTACTGC  
TGACACTGGT CCAGCCGTCT CTCTCTCATG GTCCAGTAAT GCAATACCCT GTTCTCCCGT TGGAGAGATT CATTCAAGAT  
ATTTTCACT TGCTGTTTCA GAGCTTTGAT GTGCGTCACC ATTCTGGCA TGTTCAGCT TGTTCCTGTG CAGGTATTTC  
AGGAAGACGT CTGCATTNCT CCGAGCAAGN GGTGCAAGCC TTCAGGAATG CCTCCTTINC TNCAGGGTGC GGTTTTCA

SEQ ID NO:744: (Length of Sequence = 359 Nucleotides)

TGCGACAGAG TCTTGCACTG TCACCTGGGC TGGAGTGCAG TGGTGCAATC TCAGCTCACT GCAACCTCTG CCTTCCGGGT  
TCAAGCCATT CTCTGCCTC AGCCTCCCAG GTAGCTGGGA TTACAGGCAC CTGCCACCAT GCCCAGCTAA CTTTTTGTAT  
TGTTTTTTTT AGTAGAGATG GGGTTTCACT ATGTTGGCCA GGCTGGTCTC AAACCTCTGA CCTGCTGATC TGTGCGCCTN  
GGCCCCCAA AGTTCTGGGA GTACAGGCGT GAACCAACGN GNCCGGCTGG GGCTGCTTAT TTAAATCCCC TAGAAAGAGG  
GATTCTNCAG CTACACCACA CCTTAACCT NGAAGGACC

SEQ ID NO:745: (Length of Sequence = 361 Nucleotides)

CCCTTAATTA AAGTTTTTAT TTTTAAAAA CGTAACAGAC CACTCTAAGA AACTTTGGCA TTCAAAGCAG TAGTTACTGT  
TATTTGCTAA CTCGAAAAA AAAATTTTNC CCCTCACAAA CAACCGGCAA ACTCCTGCCA CTTCTAGCT TGGTGGCTGC

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CAGCGTGAC TGCAGGGAAA CGGTGGGTGG AGGGATAGGA AGGCCCTCAC GCTCCCAACC CACGGAGAAA NTGCAGATGG  
 TGACAAGCTG CATCTGGACT CCAGGNTGTA TCTGACAAAG AGGGAGATGG TNTCCTCCNT CCCCTNCACC AGCTCCACTT  
 TTNCTGCTGA AGAAACAGAG ATGTGGAGGC AGGCGTGACC T

SEQ ID NO:746: (Length of Sequence = 285 Nucleotides)

GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAAG GACAATTTAC AAACTAAGAA TAGTAACATA  
 GCTTTCAGCA TCCTGTGCTT GAACATCACA CATCTACAAG TCTTTCAGN CTTAATGCAA CAGGAATNTG TCTGGAGACC  
 AGCAAGANCA TCAATAGAGA GCACTGNTCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCACAC AACGGATTNT  
 TAGGGGAGGA TTTGGGNGAA GCAGCCCAT TGTCTAATAC ATTGG

SEQ ID NO:747: (Length of Sequence = 302 Nucleotides)

CAATGCAGTT TTAGAGTGCT CATTCTTTCA ACTTATTTGA CAAATATTTA CTGAATGTCT GCCATAAGGC AGTAAAGGCA  
 CAGAATGACT CAAAGCCTTT TTNCCCTTAT GGGGTGTAAT TNCTAGTGGT GGAGACAGAC AATGAGCAAG TAAACAATCA  
 ATCGGCTAAT GATAACTACT GTGAAGAAAA TAAAGCAGGN CAAGGGAATA GAGTATGCCA TCATTAAGAC TGGTTAGGGA  
 AAGCTTCTTT GAAGACATGG CAGCTATTGA AAACCTGACT GATACAAAGA AGCAAGTCAT GT

SEQ ID NO:748: (Length of Sequence = 346 Nucleotides)

GAGACCAGCC TGGGCAACAC AGTGAAACCC TCCTCTCTAA AAAGAAGAAA AAAATAAGAG TTTTGAGTTT TTCCAAGAA  
 GAATGCTCAG TACGTTTGIN ACTATCAGA AAGAAGAATC TGAGGTCCT GACGTGTAA CAGAGTTGTG GGTACCATCT  
 CACCAGAATT GCTGCCCTGA AGCCAAAGGA CTGAGCTGCT CAGATCTGGA AGTAATCTGA GCCCCATTT CCAAGAAGAG  
 AATTGCAGAA TTTTATAGGA AGAAGGGACC TGATCCCTGT CAATGGAAGC ATTTTAAAT TTTTAACTGA AGTTCAGGA  
 GCATACAAAA AGCCAGGNAA TTTACC

SEQ ID NO:749: (Length of Sequence = 325 Nucleotides)

CTAAACTTTA TTTTCAAAG CITAAGGCC AAATACAAAC TGAGGTCTTC CTTCCTAACA AATTAATACT AAAATGAAAC  
 AGCTTTTNTT GTGTCTTAA GACAAAATAA GGAAGGAAA CGTAGCTGCA GTGTCCACG ATGGATATG GTTCTTTAA  
 ATATATCTGA AAGTAGTAGT CAGAATGANT TATGGTTGGA AAACAGAGN ATCTTCTGGT TGCAGGTGCA AAGTGACTTT  
 NTTTTATCTT GTCTCAGTCT CTTGATAGC CACTTCACTC TGCTACTACT CACTTTCTC CTAAAATAC TTCATCTATT  
 TTCAG

SEQ ID NO:750: (Length of Sequence = 341 Nucleotides)

TGTATTTTNA GTAGAGAAGG GGTTCGCCA AGTTGGNCAG GCTGGTCTCG AACTCCTGAT CTCAGGAGAT CGGCTGCCT  
 CGGCTCCCA AAATGCTGGG ATTATAGGCG TGACACTGTC TCTGGTTTAA GAGAACCATG GGCTGAGATA TINAGGAATT  
 CTCCAGGCCA CGAATCTTGG GGCATGCAGC CTCTCCGTA CCCCACAGCA TCTNGGGGAG CTGGTGTGCT GATGGGGTCA  
 GCTCTCCAG CTGCCTGGAA AATTCTCAGA CACTCCCTAA GAGGACATCT CCACCCCTNC CACTCTNACG TCACTGCTTT  
 CTAACATGC TCATTGTTT G

SEQ ID NO:751: (Length of Sequence = 377 Nucleotides)

TTTTTTGAGA CGGAGCTTNG CTCTGTACC CAGGCTGGAG TGCAGTAAGC CCATCTCTGC TCACTGCAAG CTTACACCAT  
 TCTCCTGCCT CAGCTTCCA AGTAGCTGGG ACCACAGATG CCCGCCACCA TGCCCGGCTA ATTTTMTGTG TGTGTGTTT  
 TAGTAGAGAT GGGGTTCAC CATGTTAGCC AGGATGGTCT GGCCCTCCAG CTTCCTCTGA GTCCCTTCAT AACATTGTT

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TTATCTGTGA AAATAATTGG TTCCATTCTT AATTAGTACA TAATGAGAGA GGCAGTGTGA TGGTTTGTGC CTAAGNCCTT  
TCTTGCCAAG ACTTTCAAAG CCAAAAACCT CANCAGTTTT CCTAGATGAC TAGACAG

SEQ ID NO:752: (Length of Sequence = 359 Nucleotides)

AAGTCAGGCG TTCTTGGGGC AGCTGTCTTG TGAAGTTGGT GGGACGTGCT ACCCTGGGCC AGCTCCAGGT GAGCNTGGCT  
TCGGTGGTCC CCGTGGGCTC CINAGTGGCG AGGGTGAGGC CTGGCACTGG GCCTCTAACT GGCCCCGTGG CCCTGCAGTC  
TTTNGTGTCT GTGTCCCGCT TGCCCTTTNT CCGGCTGTTC CAAGCGCTGC TAAGCCTCAT CGNCCCNAG TACTTTNACA  
ANCTGGCGCC CTGNTGGA GCAAGTGAGT GGCCATCANT CGTGGTCATC TTGENTCAT NATCCAGCT TTGGCCCCGT  
GTTGGGCTCG GCAAGCAGCT TCTCCTTGGG GAGGGTCT

SEQ ID NO:753: (Length of Sequence = Nucleotides)

AGCTTCAACT TGGAAAGAAG GATGATGCAG TTTTGGGCC TCCGGCCATC AATNACCGAC AGCNCTTTGA CCTTGGCGGA  
AGCCAGGTAT ATGINTTCAG TGGAGCCCAG CTCTTTCTGG TGCCCTCTGT AGGCTGAAAA CATCTTTTCA AAATCCTCTA  
GGTCCAGGNT CCGAAATACC TGATGTTCAT CAATCTCAT CCATACGGTG CCAGGGACAC GCTCCTCAT CAGCTTCACC  
CAGTGAAGG ACTTCAGTGG GTGAGAAGGC TGGGGACAC GCTTTTCTCT GAGTGGGACG

SEQ ID NO:754: (Length of Sequence = 342 Nucleotides)

CTGTGAAGT GCAGGTTTGA TCCAGCCAGT ATAGAACTAG CTCTGTAGGG GTGAGGAGGA CTGINTGTG TATCATCCTT  
GATTGINTTC CTTCAAGGAG CATTGCACTG TAAGTACATC AGAATGACAA ATTGATGAAC TGCAACAGTA TCTTTTGTG  
AATGTTCCAC ATAATGCAAA TGCCATACGT TGTGTGAATA TTATGTTGGA ATACAGTGCT GATATCTTGG AAAACCATAA  
CTGCCTCTTA ATTTAACATA GNGTAATACA TAGTNTGTGA TTTTPTTAA AGTGAGCTNT AATGGGNAAG TATTTTNTAT  
ATGCTTTAGC TATAGCTAAA GG

SEQ ID NO:755: (Length of Sequence = 321 Nucleotides)

CATTGCCATC TTCTCAGTCC TTCTCCCTTT CTTTCCAAGT AGTTTACGGC CCTAGGGCGA AGGTGGCTTT TATTTCTCT  
CTTGGGGAAG GAGGGGGAGG GAGCTTTCCC AAGCACATCA ACCTAAGGAA GGGGTGGTTG CNCCCCAGC AGCGAGGGGC  
TGGAATGCT GATCATTCGG AAGGAAGGGT TCGTCTTGT CCACCTCCTG GCCCTTGGCT GCAAGGGTGT GCTTNGCAGG  
GGTCACTCCC CTTGGGGGTG GCAGCTCCTG CATCAGTNGA GGGCACAAGG AGGTATCTGC TGGTGTTCAC GAAGAGGAGG  
G

SEQ ID NO:756: (Length of Sequence = 368 Nucleotides)

TGGCATGGTT GCATGTNCCT GTAATCTCAG CTAATTGGAG GCTGAGGCAG GAGAATTGCT TGAACCTGGG AGGTGGAGTT  
TGCACTGAGC CAAGATCGCA CCACTGCACT CTAGCCTGGG TGACCGAGCA AGATTCAATT TCAAAATAAA TAAATAAATA  
AATGAGAAAA AAATATAGAT ATAGTAAAGG GAACAATTAC ATTCTACAAT ATTTTAGCAG AAGTAAATAT GGTTTAATT  
AATGGAACA GCTCTGCTCT ATNGAAAATT CACAAATATT AAAAATAAAC ACACCTCTACA TTAAACCTCT GAGCACTAGA  
NGCTTACCTA CTTATTCATA GGGCTCACAT ACTGTAAGGG GGGTAAAT

SEQ ID NO:757: (Length of Sequence = 339 Nucleotides)

CTTCCACTGC CAGGTATATG TCCCGGGAAG CCCCCACCC CCTCGNTTTC CTCTCCGCT TTCCCTAACC CGTCTCGCGG  
GGGCATCTAC GNTCTGTCCT CENCCTCTC CTNCTCGAAC TCCCTTGTG CTGCGGCGT GGCGTCTGG TACTGCTGGT  
ACTCGGACAC CAGGTGCTTC ATGTGCTCT CGGCCTGGT GAACCTCATC TCGTCCATGC CCTCNCCGT NTACCACTGC  
AGGAAGGCCT TCGNCGGA CATGGCGTG AACTGCTGG AGATGCGCTT NAACAGNTCC TGGGATGGCC GTGCTGTTTC  
CGATGAAGGT GGCCGACAT

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SEQ ID NO:758: (Length of Sequence = 356 Nucleotides)

TTTTTTTGTA TTTCTTTTGT ATATGGGTTA AATGTTTCCG TTATATTTCC TAATTGGCTA TTGCTCGTAT AAATAGATGT  
GGTTTTAGGC ACATATTTTA TATCTGGCTC CTATACTAAA AATCTTTTAT CATTTCACAC AGTTTTCAGT TATGCTCTTG  
GGTTTGAAGG TAGACAATAA TGTCATCTAC ACATAATGAT ACINCTGTTT TCNCTTTTAA AATGCTTATA GCTCTTTNAT  
TTTTATTGCT TTGCTTGTGC TATAAATNCT AGAATGAAGT TAAATAATCA TAGCAGATAT CCTTTTCTCT GATTTAATTA  
TAATGCTCCT GAAATTTTAT TAAGTATGAT GACTGT

SEQ ID NO:759: (Length of Sequence = 333 Nucleotides)

GCCATGTGGG GCGGGGAGGG CGGTGGGGTC GGGCGGGGGG GACGGTCAAA GACTTCATAA ATAAGAGGCG GGTCCCAGAC  
CCNCAATTT GTCAACATGT CTTAAATAGG TGCATTATTT AAATCTTATG TACAACAAGA ATCATTGTGC ATAGCAATGG  
TGAGGACACA GGACGGGTGC AGTGATGTGA CTGGGTCTTC TTGTCCCAAG GCGGGGGGGC GAGTTCCGAG CTCAGCTCGG  
AGCCTCTAGG AAGAAAGCAT CCTTGTCTCG GCGGCAATN GTGGCATCGG AGTTGACTTT TCCCACACGA CGGCATCAAN  
CACAAAGGCA AAG

SEQ ID NO:760: (Length of Sequence = 311 Nucleotides)

CGTCTCTCT GCCCAACCCG CCCCCACCA TTGCCGAGGA GGCTGAAGAT GGAGATGGGT CCGGCAGCAT CTNCGGTTCC  
ACCGGAGACC GCTTGGTGGC ATCAGCTTGC CCGGCCCGGC CGCAGATATT CCGGCCTCGA GAACAGCTCA TGCTGAGAGC  
CAACAGCCTG AAGAAAGCAA TTCGTCAGAT CATAGAACAC ACAGAAAAAG CTGTGATGA GCAGAATGCC CAGACCCAGG  
AGCAGGAGGG CTTCGTCTG GGGCTCTNIN AGTCAGAGGN GAAGATNGAC CACAGAGTTT GNCCACCACT T

SEQ ID NO:761: (Length of Sequence = 314 Nucleotides)

TTTTTTTCT TTTTTTAAG AGACAGGGTC TCACTCTCTT TCCCAGGCTG GAGTGCAGTG GCAACGATCA TAGCTCACTG  
CATCTCGAA CTCTGGCCC CAAGGGATCC TCCACTTTG GCCTCCCAA GCACTGAGAT TGCAGGCGTG AGACACCTCA  
CCTGGCTTGT CTGAGAACAT CTTTTAAAA AAATCCCTTC TCTTGGGTTT TCTGTACCC ATATGCTAC TCAATTTGGT  
TGTCTCAGCT TTGTTGTTGT AATGCAAAAG CAGCCATAGA CANTACATGC ATTGAATGAG TGTAGTGCAT TCCA

SEQ ID NO:762: (Length of Sequence = 319 Nucleotides)

ATAAAGGTAT ATAAAGTTG AATTAAAAAG ACACATATCA TGAAAATACT AACAAAAAGC TATAATAGCT ATATTAATAT  
CAGGTAAAAT AGACTTTAGG ACAAAGCAT TATTAAGGAA GGGAAAGTTG CTATAATAAT AAAAGGTTGA GTTAATCAAA  
AAGATATAAT AGTTTTAAAC ATTATGCATA TAATTAAAT CCTCAAAAT AGACAAAGCA CATATTGATA CTTAAGGATG  
AAATTGATAA ATCCATCACC ACAGTGGGAA ATTAGGAAGT TTCTGTACAC CTCTTTCCT TGTGATAGG TCAAATGGA

SEQ ID NO:763: (Length of Sequence = 369 Nucleotides)

TCCAACTCC TGCCAGATAT AATTCTAAAA ATCTGTTTGT TAATTTTATT ATTTTATTTT TGGATTTTAA AATGCTTGGG  
AATTGGGAGA TATGCACAAT TGTCTTTGCT TTGTCACAA AATTAAATGC GTATTTGGGT ACTTATAGGA CACTATTTGT  
AAAAACATTT ATTTCTTCAG ACATTGATGG TCTTGTCCCA GTTATTACA ACATCTACAT GTTTAAGAAT AAATTTCTTA  
TCTACTTCTT ATTCATTGA AAATTACCTT TCTATCTCC TACTCTGGAA GTCTTTATGN ATTCTGTCTT AATCATTAGT  
ATCCCATGTC TTCTTCAAGA GGATGTCGT CAGTAGGAA TTCTCCCA

SEQ ID NO:764: (Length of Sequence = 381 Nucleotides)

CGGGTAGCAG TTGCTGAGTG TCAGCTAGAC AGCAGCGACT AGGGCTGGG GCGCGGCGAG ATGCCCTTNT TCACCGCCAA  
CCCCCTCGAG CAAGACGTGG AAAAAGCCAC GAATGAGTAC AACACTACAG AAGATTGGAG TCTTATTATG GACATATGTG

ACAAAGTTGG AAGTACTCCT AATGGAGCGA AAGATTGCCT AAAAGCCATA ATGAAAAGGG TAAATCATAA GGTTCACAT  
GTTGCTCTGC AAGCACTAAC TCTTCTTGGG GCTTGTGTGG CAAACTNTGG AAAGATATTT CATTTAGAAG TATGTTCCCG  
TGGATTTTNC AACAGAAGTA CGTGTCTGTA TTAATAATAA GGGCACATCC TAAAGTATGT G

SEQ ID NO:765: (Length of Sequence = 329 Nucleotides)

TTGTCGTCTT GATGCAGGAG CTGAGGAGCT GCACAGAAGG TTAAAGAGC TGTAACACAA ACAGGGCTGC AACATGCCCC  
TTGTCCCCCA CAGGGAGAGA AGAGCTCTGG CCTCGGAGA AGCCAGACC TGGGAGCTCC TTGAGCCOOG GCTGTGACTC  
CCTCTTTGGG GCCCTGGTTC GCGTCACTGC ATTOGCCAGT GCCACTGTTG GAAGCTGCTT GTNATGCGCC TGGTCCAGGG  
GGAAGCTGTT TGTGTGTGTC CTGGTCCAGC CACCTCATGG AGAGCCTGTG CTGGCACCTG GGAGCTGCCC AACCTGGGCA  
GCAAGCTTT

SEQ ID NO:766: (Length of Sequence = 321 Nucleotides)

GCAGTGGCAG GTAGATTTTA TTGGCCTGGG ACACACAGGG GATACCCCTCA CCCACGATGG GGTGGGGGGT GTGGTGTGTA  
AGATATAATC TNATGGTCAC TTGTGGTAGA ATCGGGGTT CTGGCTGINT TGGATGAAGG GGAGCCGAGG GCCAGGTGG  
CTGGTAGCTG CAAACCCGAC TTTCTGTCTG GCTGCATCTG CACAGGGAGC TGGGGGAAG CAAGGAGTCC AGGGGCTGGA  
TGCAGAGCTT GAGTCGGAGA AGCCAGTCTG CTGGTTAGCA TGINCCATCT GCTTTINCAA GGNACAGGCA CCACCAGGCT  
T

SEQ ID NO:767: (Length of Sequence = 313 Nucleotides)

ACCGCCCCCTC TAGTTCATA TTCTGTCCCC GTACCCAGG GCATCATAGA CACTCAACAA CCATTCGTTG AATATGCAAT  
TGGATGAAAT GAATAACGA CCAGAGGAAT AATCCAGACA GAGCAGCAGT GGCCAAGGGA AGGGAGGATT GATTATGGG  
AGAAAATTAG GGAATGAAA TCCATAGAAA GGGTTTGCTT AAGTINAGAGT GATGACTINGA GCCAGAAGAC ACCCGGGGGA  
GAGGAATTINT TTCACATGGT AGGAAAAGGG GAGGAGGGAG AGAGGTGGGG TGGTGGAGTN CAGCCTCGAG GCT

SEQ ID NO:768: (Length of Sequence = 372 Nucleotides)

TCTCTCTCT GCTGTCTTAT ATTCTGCACG TCCTTAGTAA CCCCTGTGGC CCACTTCTTA CTTAGGTCTC TCCTAACATG  
TATCTATGAC ACATTGATCC CTAACAGCTA TGATTCTNCT TATACTTTIN CAGTAATTIA AATTCTATCA TTCTACTGCT  
TGTTCAATAC ATCTCTCTAT GTAAATCTTG ACTCCATAAT GAGGTTTTTA ACTTCGAAGG GGTGGAAGT TATCTGCTGC  
CTTGGTACCC CCCCGCCATT ACACAAGAGT ACATTTTAAG CACATTACAC CTGAGTGATT GTNGTAAAAC ACAGATGCAA  
TCTTTCACC ATCCTCTAGG AATTCTTCTG TGGGCTTTCC ATTGGGTTAC CC

SEQ ID NO:769: (Length of Sequence = 321 Nucleotides)

GCAGCCAGAG CTCCAAGGCT CCCCGGGCG ACCTGACCGC CGAGGAGGCA GCAGGCGCTT CCCCGCGAA GGCCAACGGC  
ATGGAGAATG GCCACGTGAA AAGCAATGGA GACTTATCCC CCAAGGGTGA AGGGGAGTCC CCCCTGTGA ACGGAACAGA  
TGAGGCAGCC GGGGCCACTN GCGATGCCAT CGAGCCAGCA CCCCTAGCC AGGGTGCTGA GGCCAAGGGG GAGGTCCCC  
CCAAGGAGAC CCCCAAGAAG AAGAAGAAAT TINTTTTCAA GAAGCCTTTC AAATTGAGCG GCTGTCTCTT CAAGAGAAAT  
C

SEQ ID NO:770: (Length of Sequence = 364 Nucleotides)

TTAAATCAGG AAATGTGATG CCTCCATCTA TGGTTTTTGA AAGTCATCAG CCAGAGCTAA GGTAAATGAGG ATTCCCTCCT  
TCATGTTTAT ATGTCTTTAC ACTGTGCACA ACTGTCCCTA AAAAAACAAA CCCCTGGCCA ATTTCTCCAG GCTTATGCTC  
TCCCGGTTT CAGTACATT TCAGCTTAGC ATTTTCAAAA TAACAATTG TTCTTGGCAG CTTGTCTATA TATTNNATTT

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ACCTCTCTTG TTATCCCCAC TTTTCATGCT CTATGTCCCA TAGGCAATTT GACAAAGACT GCTTTGACAA AGGATTCCCTA  
GACTTCTATC TCTACCTCTC ATCTGACTTG GGCGGAGGAT TAGG

SEQ ID NO:771: (Length of Sequence = 357 Nucleotides)

CAGCTCACTG CAACCTCCAC CTCACAGGTT CAAGTGATTG CTGTCCTCAN CTTCCCAAGT AGCTGGGACT ACCGGTGCAC  
ACCACCATGT CCAGCTAATT TTTGTATTTT TNATTAGAGA CAGGGTTTCA CTATATGTTG GCCAGGCTGG TCTCAAACCTC  
CTGACCTCAA GTGATCCGCC CACCTCGGCG TCCCAAAATG CTGGGATTAC AGGTGTGAGC CACCATGCC GGCCTAAATT  
ATAGCTATTT TAGAATGTTG AAAGTAGTAT TATGTGATTT CAGTTTGCCA TAAATTTTTC ATATGGTTAC TAATTATTTT  
TNTTTTGTG GATATATCTT CTGGAAATCT ATTGAGG

SEQ ID NO:772: (Length of Sequence = 359 Nucleotides)

CCTCTCAGGA AAACACCTAG ACATTATGTA ATGTATTTGA AGATTAATGT ACCCTTTAAC CAGCAGTTGT GTACCTAGGT  
ACAACTTTG CAAGCACACA CGCATGINTG TNCCAAAAG CACATACAAA AACACTCCTA ACAGCATTAT TTGTAATAAT  
AAAATATAAG AAATTACCTA AATATCCATC GACTGCCATT GGTAGTATGG TTATACAATG GAATCTACA CAGCAATGAA  
AAGGAGCTAG AGCTACATGC AACAACATGG ATACAACCTA CAAACGTAAG ACTTAGTGGG AAAANGCTAG ACACAAAGTT  
AACACCTTCT ATATGTGGGT TCCAGTTATA TAAAACCCA

SEQ ID NO:773: (Length of Sequence = 361 Nucleotides)

GAGCCTACGG CAGAAAAAGA AACATCTTCC TATAAAAAC AGACAGAATA ATTCTCAGAA TCTGCTTTGC GATGTGTGCG  
TTCAACCCAC AGAGTAAAC TTTNCTTTG ATAGAGCAGT TTTGAAACAC TCTTTTGTGTA GTATTINCAT GTGTATATTT  
AGAGCGCCTT GAAGCCTACG CTAGAAATGG AAATATCTCC CCATAAACC AAGACAGAAG CAATCTCAGA AACTAATGTG  
TGATGCTGC ATTCCACACA CACGGTGGAC CATTTCTCTT GATAGAGCAG TTTTGAAACA CTCTTCTGT AGAATCTGCA  
AGTGGGATAA TTGGGACCTC CTAGAGGGCC TTCGTGGAA C

SEQ ID NO:774: (Length of Sequence = 387 Nucleotides)

GTTTCGCTCT TGTTGCCAG GCTGGAGTGC AATGGCGCAA TCTCGACTCA CCACAACCTC CGCCTCCCAG GTTCAAGCAA  
TTCTCCTGCC TCAGCCTCCC GAGTAGCTGG GATTACAGGC ATGCGCCACT ACCCCAGCTA ATTTTGTATT TTNAGTAGAG  
ATGGGGTTTC TCCATGTTGG TCAGGCTGGT CTGAACTCC TGACCTCAGG TGATCCGCCT GCCTCGGCCT CCCAAAGTGC  
TGGGATTACA GGCATAAGCC ACTGCGCCCA GCCAGAAGAT GCATGATTTT TTAGGATCAT ATGCTGTTTG TAGCCATAAG  
GTAAATCATG TCTCTTCCAA TCATGACTTT TGGGAACCTC CTGAATAATA AAAATGAGAG TTGAGAT

SEQ ID NO:775: (Length of Sequence = 401 Nucleotides)

GAATTINICT TTCTGCATCG TTCTGTCATA AAAAGGGGTA CTAATATAGA ATAGAATGCA GGCTTAGGAC CCCCCTAAGC  
TCACTGTTCA ACCCAGCCCA GCAAACCTGGT CAGTTATAAA TTTTNCCTGCA GGTCCCTGAA ACAACAACAA AAAACTGGAT  
GAGGTTTCCC TCCCATCTTG TTTTATGTCC TTGGGAGCTT GACCTTATAA CCATACGGCG GTACTTTTNC TTGGTCTCTG  
CCATCCAGGG AACCAGAATT TGGGGGGTTA TGTCATAGTT AGCTCTAAAA ATTATCTTGA GCAGTTAAAA GCCTTTGCAA  
GCTTAAATTT GACTGCTGTA GGTTCCTTCT GGGGAAGGAG CAATGGGAAA CCTTNCCTAA GCTTATAGCT CANCCAGCTG

A

SEQ ID NO:776: (Length of Sequence = 345 Nucleotides)



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AACACTGGGT AAGCACTTTG TATGTCCTGG GCACTCTGCT AGAGATAATG TGCTTGAAT TGGTGGGTTT TTGGTCTCAC  
 TGACTTCAAG AATGAAGCCG TGGACCCCTG CAGTGAGTGT NACAGCTCTT AAGGTGGCGC GTCTGGAGTC TGTCCCTTCT  
 NATGTTTACA TGTTTTCANA GTTTCCTCCT TCTGGTGGGT TCGTGGGTCT CGCTGGCTCA GNGTGAAGC TGCAGACCTT  
 TNOGTTGAGT GTNACAGCTC TTAAGGCGCG GCGTCTGGAG TTGTTCTGTC CTTCCCGGTGG GCTCGTGGTC TCGCTGGGCT  
 CAGGAGTGAA GCTGCAGATC TTCCG

SEQ ID NO:777: (Length of Sequence = 229 Nucleotides)

ATTGGGGGAA CCAAGCCCA NTAACTCTAT GGCTGTGCA GACTGTGAGA GGTACTGCCT TCATGGTCTT NGGTAAGATC  
 TGGGAGAATT CCTGGATTA CCAGGCAGAA ACTCTNATTC TCTTGCTTAA CTCCCCCA AACAAATNAG TCTCTCTCTC  
 TCTCTCTCT GAGCTGCCTA GAGCTGAGGG AGGGGGTGAC ACAAGCACAG CTATGTACC AGGAAGCCA

SEQ ID NO:778: (Length of Sequence = 361 Nucleotides)

CAGAACTCA GGAATAAAGC CATTAACCTT CAAAGAATAT GTGTGTGTGT TCGATATTTT CCATTCCTAA TCCACATCCA  
 CGTTGGTCAA GTAGAGCTTC CTACTCAGAA GCACAGCAGT TGCCATGGTG TTCTCTTCCA TCTGAAAGCA GCAATTTTCC  
 GCAGCGTCCA TTTACAGAAT GTGCCATATT TACTCAGATT CTAATGTATA TTAAATATGC TTGGGAAACT TAACAAGAAA  
 CGTGCAAGCN CTCAGTAAAG AAAAGTTGTA GAAACAAAA ACTGAACAGC AGGCTTCTAG TTTCTCTCTT CCAAAATGG  
 CCTTAGTGGG ATTCAAAAT GGAAGTGTG AATAAACTG C

SEQ ID NO:779: (Length of Sequence = 392 Nucleotides)

CCTAAGATGC CTGGCACAAT CAAAGACCTT TGGTGGCTTC CAGCATTAT AAGGCAGAGT CCAACACAC ACTTAAGAAT  
 GACTTACTCC TCTGGCGGAC CCCACCATTC CCTCACCOCG CTTTGGCTCT GTCTCTCTGT GGAGCTGCCC CTGCCCCATA  
 AACTGCTTC CTCTCTACCA ACCCGGACCA TATTTCCCTT CCTCCCCCA CCAGGTCCAG CAGTACCCAC CACGTTTGTG  
 GACATCTCCC CAAGGAGCTC TCACGTATCA GAAGCAAGGA GTTAGCTTTC AGCCCCACCT CTTGTGCTTA GGTCTACAGT  
 GAGTCTCCAG TGATGCTTCC TACCGACTGC TTGGGGGTGC ACAAGAGTNA GGCCAGCAAG ATNCCAGCGG AA

SEQ ID NO:780: (Length of Sequence = 453 Nucleotides)

CTCTCTATTT TCTCTTTTCC TTTTGACCTA CCATAGGAGA CAGATTGCTC ATCTCCAAAT TTCTCTGCTG TCTGGGANT  
 GCTGGTTTTT CAACCTTGGT TAGGGTTTGG CTTAGGAATA GCATAATATC CCTTTGTGAG AGGTTAAACA CTTGAGTTAA  
 ATTTTGGAGG CCAGGTGTGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GGGGCCAAGG TGGGCAGATC ACGAGGTACG  
 GAGATCAAGA CCATCCCTGC CAATATGGTG AAAACCCGTC TTTACTAAGA ATACAATAAT TAGCTGGATG TGGTGGCACA  
 CGCTGTGGG TCCAGCTAC TTGGGAGGCT GAGGCGGGAG AATCGCTTGA GNTGGGGAA GTGGAGGTTG CAGTNAGGGT  
 GAGATCGCGC CACTGCACIN CAGCCTGGGN TGAGAGAGCA AGACTTCCGT TTC

SEQ ID NO:781: (Length of Sequence = 306 Nucleotides)

AAGCTACTCG GGAGGCTGAG GTGGGAGAAT CGCTTGAACC TGGGAGACGG AGGTTGCAGA GAGCGAGAT TCGCCATCA  
 CACTCCAGCC TGGGCGACAG AGTGAACTC CATCTCAAAA AAAAAAAAAA AGAACCACCA CTNTAACTGA GAAATAGATG  
 NTCCCAITAA CAGTTTAGAA AATGTATATA ACTCTAATCC ACAGAGGTTT ATACTTACAA GCAACTCATG GTTTCCTTT  
 TAAGGGCCAC ATGTGGAAAA TTAATCTGAA CAGTTAGTGC AAGGAGGAGT CATACTCAG TGGAAA

SEQ ID NO:782: (Length of Sequence = 443 Nucleotides)

GTCTGGGCT CCTGACCTCA GTGATCTGC CTGCTCGGC CTCCCAAAGT GCTGGGACTA CAGGCATGAG CCACTGCACC  
 TGGCCTAATT CTACATTTIN ATCTACAGCA GACCTTTTAT CATAAAGAG TTTCTATAAA ACATTTCTCA AAAGAAAATA

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TGTATTGACA TTCTATTTTC TTTCTCTCC AGATACTATT TTTNGGATTT NAAACATACA CAATACTTAG GAGACTTGTT  
TTACTCAGAG TGGAAAATTT TNCAGGGAC AAAGTCAACA CAANGAAACA AACACAAAA AATAGCCAGA AAGAGAACAG  
TTAAGTGCAG CTCGGTGAGT CCCGGCAGTT CCTTCCCGGC ACTGGCTCGT CCCTGGGGTT CTCAAGGTTT CATGCGGCCA  
CAGCGTCCGT CCACCTGTTC CACGNGAGCC ACATGCTGGA ATT

SEQ ID NO:783: (Length of Sequence = 350 Nucleotides)

CATTCAAGGCC GGGCACAGTG ACTCATGCTT GTAATCCCAG CATGNTTENA GACATAGCAG TAGGGACTAT CGACAAAGAA  
ACACACAGAG GGAAAAAGAA TTCCACATTT GGGAGGCTGA CGCATGAGGT TCACCTGAGG TCAGAAGTTC AAGACAAGCC  
TGGGTAAACAT GGTAAAACCC CGTCTCCACT AAAAATACAA AANITAGCTG GGCATGGTGG CCTGGGGCTG CAGTCTCGAC  
TACTTGGGAG GCTGAGGCAT GAGAACCTCT TGAACCCGGG AGGTGGAGGT TGCAGTGAGC AGAGGTCATG CTACTCTCAA  
GCCTGGGGCA ACAGAGCGAG ACCCTGTCTC

SEQ ID NO:784: (Length of Sequence = 265 Nucleotides)

ATAACTGAAA AATGGAAGAA AATATTTGCA AATTACACAT GTGAAAAGCA GTTAATATCA AAAATATATA AGANACTCAA  
AGGACTATAC AACAAAAAC AAATAACCAT GAAAAATAAG CAAAAGATAT ATATAANTNA TTINCAAAGA AAGACATACA  
TATAGCTTGG CAGATAGATG AATATGGCTC AAAGTCAATT ATCATCANGG AAAGGCAAAC CAAAACAACT CTAAGATATA  
AACTCACTCC TGTAAANTG TTAA

SEQ ID NO:785: (Length of Sequence = 363 Nucleotides)

GTAAAGNTTG AGAAATCGGA TGGTGTCTGT GTCTGTGTAG AAAGAAGTAG ACATGGGAGA CTTTTCATTT TGTCGTGAC  
TAAGAAAAAT TCTTCTGCTT TGGGATCCTG TTGATCTATG ACCTTACCCC CAATCCTGTG CTCTCTGAAA CATGTGCTGT  
GTCCACTCAG GGTAAATGG AAAAAAATA AGAAAAATGA AACCAGGAGT TGGCAATTAC TTTTTTTTTT TTAAAGACA  
GAGTCTTGCT CTGTACCCA GGCTGAAGTG CAGTGGTGAG ATCTTGGCTC ACTGCAACCT CCACCTCCCA AGCTCAAGTG  
AATCTCCAT GCCTCAGNTT TTCAGAGTNA CTGGGGATTAA NAA

SEQ ID NO:786: (Length of Sequence = 291 Nucleotides)

AACAACAATC AGCCACAATG TGCTTTTAAG GATTTAACAG ATAGTAAAGA TAAATGTGAG TNITAAGAAT GGGATTTTAA  
GACTAGGCTG ACACAAGGGA TCTTCTTNA ATAAGGNTCT TGAGCAATTG TTTTTTTTGA GCTCATCCTT AAGGGCTGGA  
CAGGAAGAAT CCTGTGTTAT GTGTGCATGT TGAGCAATGC AAAAAACACT CTGCCAAATC CTNGATACCA CATGGTCTNG  
AGAAATGCAT GAGTGATTAA ACGCAGGNT GGGTGTAGTC ATTATGTTCC T

SEQ ID NO:787: (Length of Sequence = 256 Nucleotides)

TATTTCTGTA TAATTTINAT TATGACCATA AAAATAACAA TGTAGTCAAT AACAAITTA TGTACATTT TAAATAAATT  
AAAGTATATA ATTACACTGN TTGTAATAAA AAGTATAAAT GTTAGAGGTG ATGGATACCT TATTTACCCT AATGTAATT  
CTACACATTG TAGGCTGAA TGAAATATG CCATATAAGG CATAAATATA TACACATACT ATATACCCAC AAATACCAAT  
AATAAATTC AATAAG

SEQ ID NO:788: (Length of Sequence = 322 Nucleotides)

GGTCCAATGA AGCTTCAACT CGTTTTCAGC TCAAAGCAGA CGGCAATCA GCAAAAAGCA AAAATAATGT ATCTTACTGC  
ATTACAGACA AAAAAAACA AAAAAACAGA GTGAACTAG ANCIATTTTC AATAGTAGTT TTCTGACAGC TATATAANCA  
AATATAGANG ACATTATGGA ATTAGTATG TGAACGAGAA CTGTCCATG TATCTGCTT GCCAGCAAAG GTAGAGATGG

CTGINATATT TGTAATGGTT TACTATGAAG GCTGTTCCAT AACCTNCAAT ATCCACTGNT CTTGGGTGGT ATACCAAGGA  
TA

SEQ ID NO:789: (Length of Sequence = 357 Nucleotides)

TCAATGTGGC ATTTGTTTTT NTTAGAAAAC CCTTAGTAA GCACCTCTCT AACCCAGAAT AGACACTGGG TATCCTCCAA  
GAGTCCATA GCTTTCATTT CATCTCCAC CCTCTTCTGA GAGGGGGAGG CAGGGGATAG GGGTGGTGT AGGCAGTCTC  
CAAAATGCCC CTCCTAGACC CTTGAGAGAA TTCATGTTGC CAGCAATAAA CCAACAGCAC CTCAGTGGG CATCANAGGG  
CCTCTAGGC TCAAGGCIAT TGCCAAAGGG CATTCCTGTT TTATGAGCTT CACGATGGGA ACCAAGGNAG GCTCTGCCAA  
GACTTCCTAG GGGCTGGT CTTCAACTTA TGGGCCT

SEQ ID NO:790: (Length of Sequence = 366 Nucleotides)

TGGCCAGGCT GGTCTGAAC TCTGACCTC ATGATACACC CGCCTTGGCC TOCCAAAGTG CTGGGAATAC AGGCGTGAGC  
ACTGCACCCA GCCTGTGTG ATCTTTTAAA GTACAGTTC CATAGATTTA CATTAAGAAT AAAAAAGTCA TGACATCTTG  
CTTTTATATG GCAGTTTACT CAAGCTTTTT AAAGAAAGAG CATTCATCTT GCTTTTACGT GGTTTTAGAA TGTTGAAAAC  
CTTTTGTAA ATCTGAGTAA TTTACTGCAT TTNCCATTAA TTCAGCTTAG TTAGACTGCT GGTCCAGTG CTTGTTTTTG  
CTGTACATA TACCCTAATA TGCTTTTTAA CATATGNCCA AATTCC

SEQ ID NO:791: (Length of Sequence = 317 Nucleotides)

AACAACTCCA ACCATAATGG AGAAGGAAAT GGCCAGAGTG GCCACTCTGC AGCGGGCCCT GGTTTTACGA GCAGAACTGA  
GCCTAGCAA TCTCTGGAA GTCTGGCTA TAGTTACAA GATAGTTTG GGTGAGCGT GCCACGAAAT GTCAGTGGCT  
TTCTCAGTA TCTACAGGG CAAGAAAAGG GAGATTTAC TGGCCATGG GAACGAAAG GTAGAAATGT AAAATTCCCA  
AGCCTCTGC AGGAAGTGCT TCAGGNTAC CACCACCACC CTNACAAGN GATATCTAG GGGTACTCA AGAGCAT

SEQ ID NO:792: (Length of Sequence = 258 Nucleotides)

GATCAATATA TCCAGGAATT TGTGAAAAGA TCTTAACTT TTCAAACATG TCACAGGTAG TACTTGAAGT ATGCTTGGTA  
AAATGTACG GTTAAAGCAG TATGTTCTC AGATAGCCTG AGATTTTATT TAACAATTAT GTATCTAAGT CTACTAATAC  
ATTGAGCAA AAGAGTGTG GGTNCATAAA TAAGANGTCA GTATTTCACT TAGATTATT CAGAACTTG TAAGTNCCTG  
TAAATAGCTA CTCTGAAA

SEQ ID NO:793: (Length of Sequence = 282 Nucleotides)

GGATGACAT GGTCACTCTN ACTTAAAGA AACATTTTAG GTTCACACTT GCCAAGTTAG GAAGAAAACC AACCTTAGAT  
CCCTTCCCC CCACCAATAC TCTTTCCCC AACACCGTC CCCACCGNC TCTATGTTA ATTGAATTTT TATTTGTGAT  
ATATAGAAA CCTAACCCAT GGCTGINATG CTGAGTGTCA TTGGCTTCA AGCTCGAACC AGGNNACAGC TTGGCCTGGA  
ACCTGAGAC AAGATGCTGG CTTCAANAAG TGGGGGCTCA CG

SEQ ID NO:794: (Length of Sequence = 330 Nucleotides)

GTGAGGCTG CAGGGAGCCA TGTTACCCC ACTGCACTAC AGCCAGGGTG ACAACAAGAA CCTTTCTCG CGTGAACCCA  
GGGGGGGAG TTGAGTGAG CCAAGATCGT GCCACTGCAC TCCACCAGCC TGGGTGACAG AGCAAGACTC CGTCTCAAAA  
AAAAGTTTAC TACTCGGCTT TAATTATTC GTTTCGGTT TGGGTGAAAT NATTTTATTA CTGACTGGTT CCTTAGTTGT  
ACAGAAGCCT ATTATCTTA GAGAGACTCT TCATGGTAAT TAATCAGAT TCTTATTTT CTTGGGTGAA AGGANGGCAA  
GTGGATCTAA

SEQ ID NO:795: (Length of Sequence = 332 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATATC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT  
CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGANGT GGTATCCAGA  
TAGGTTATCC TTGGAGAGTA TCCAGGGATG TCTCTTTNCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG  
AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTNAGAATT CACGTAAGGN ATGATAATCT GAATTTCCAG GGCTAGGCTC  
AGAAGCAGAA AT

SEQ ID NO:796: (Length of Sequence = 305 Nucleotides)

CCCAAGGGGA CAGCCTGANC TCCCTGCTCA TAGTAGTGGC CAAATAATTT GGTGGACTGT GCCAACGCTA CTCCTGGGTT  
TAATACCCAT CTCTAGGCTT AAAGATGAGA GAACCTGGGA CTGTTGAGCA TGTTTAATAC TTTCCTTGAT TTTTINCTTC  
CTGTTTATGT GGGAGTTGA TTTAAATGAC TGATAATGTG TATGAAAGCA CTGTAAAACA TAAGAGAAAA ACCAATTAGT  
GTATTGGCAA TCATGCAGTT AACATTTGAA AGTGCAGTGT AAATTGTGAA GCATTATGTA AATCA

SEQ ID NO:797: (Length of Sequence = 337 Nucleotides)

GGCTGCATTA TGACAAGAAG TCAAGCTTCA TGACAGTTAG TATGGGCTGG AGTCTGCAAA GTCTGAAGTG TATTCTCATA  
GAATGATTCC AGGTTTCAGG GTGTTCCACC TGCCAGAACC CAAACTACA ACTATGGGCG ACACAAGGGA AGTTTTAGAA  
ATCTCCCTCT ACACGCATTT CTGGTTTCTT ATTATTCTC CATGGCAGCT GACAGATCTG GAAGTGNAAA TAGGGGATTC  
TCAAAATCAA AGCCANGAAG ACACCTTGTG TGACACCAAT GGAGTCTCAG AGGGTGGGAA TAGAAGTGAC TINGNCCAG  
GCATTTGCTG GGAAGTT

SEQ ID NO:798: (Length of Sequence = 341 Nucleotides)

GAACCCGGA AGGTCTAGGC TACAGTGAGC CATGTTTGCA CCACTGCACC CCAGCCTGGG TGACAGAGTG AGACACTGTC  
TCCAAAAATA ATAGTGATAA TAATAATAGT CATTTATTTT AAGTCTACAT GCTGAGATGC CAGAACAAGT AAAATTGGAT  
TATAGATTCA AGCAGTATGT AGGTATACCT TCATAAACTG AATACTGATG TAATTTTGGA TGATTAAAAA CAGNCTTTTA  
GTAGGTGTTT AAAAATCTGG NTAATTCCTT TCATGNCATT CAAACATTTA GGTGGCCTGT CTTTGTTTTT TTAGNTATA  
ACTTGCAAAC ATTCANITGT T

SEQ ID NO:799: (Length of Sequence = 322 Nucleotides)

TTTTTGAGTA ATGAATTCAT TTAATATAAA CTTTAGTATA GCAGAATACT ACAGGTACC CACATTTAAC CCTAAAAACA  
AACAAATGAC AGGCACCTCA GTGAAATAAC AAGCCCATGT TCAAATATAA AATGCTAAAA GTGAGAAAGA AATTATGAAA  
ATATATACCT TTAATTTGCA GACATATAAA CACTTTTGGT ACAGTACAGA TGCATGATGC CAAAAAGTAA AATGNTCCAG  
TTTAAGCTAA CACATTCCCT GTTTATACAG NTTATTTTNC TATAGCTCTC ATATAANANA AATATTNCCA GCTCACACAA  
TG

SEQ ID NO:800: (Length of Sequence = 405 Nucleotides)

ATCAAGAGTT GTGTTGCTA CCGACTGAGC CTGCCAGATA ACCCTGTAGT ACAATTTTTN CAGCATAGTG GAAAAGAAAG  
CCATGNTCT GGGCAGGTCA GGGTTTGANC GCTAGTGCNT TGTATTAATG ATCATGATGA TAGCTAGTAG ACAGGGCTTA  
CCAGATACTA GGTGCTCTCT TAACTGCTTT ACATATGINA GTTAACTCAT TTAATCTTCA TGACATCACC CCTGAGATAT  
GGGTAATATT ATAATGCACA TTTTATAGGT GATGAGAGTG AAGCACTTGC ACAGATTACT CCAGCTTAGT TCATAGCAGA  
GCTGGGACTT TTAAATCAAG GCACTAGATG GTTCAGAGC TTTGTACTAC TCTTCTGGG TCTTTCACAG TCTGAGCTGG  
TCCGG

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SEQ ID NO:801: (Length of Sequence = 408 Nucleotides)

CTGCGTTCCA TGTAGCGTCT TCCACAGINC TCTGTTATAA GATGGTTTGT TACATTGCTG CAGATATTTT TGCAITGCTC  
 TTGAGTTTCT CAAGACCAGG GTTGTATTTT TCCATGCTG TCGATGAAAC AGTACATGAC AAAAGAAGGT ACTTAATACA  
 TGTITGATAA ATTAATTACT GTTGTGTAAG TTAATTATTG AAGGAAGACC CAGACTGGTT CTGATAAATC ATTGATTACA  
 TTTTACAAAT TTGGATAAAT TAGGGGAGCC TTGAGAAGTT AGAGCTCTAG GGAAGGTTCC AGGGAACGTT TGAAGGATGT  
 GAAATATGGT TTTCAAAATT CATAGTTTAT TGCAGGATTC TGGNATACTT TCCCAAGTGA GGGGNAAGAT GAGGAAGANG  
 ATGGGCTT

SEQ ID NO:802: (Length of Sequence = 343 Nucleotides)

ATGAGACTTA CTCACTATCA TAAGAATAGC TTGGGAAAGA CCCACCCCCA TGATTCAACT GGGTCCCACC CACAACACAT  
 CAGAATTATG GGAGCTACAA TTTAAGATGA GATTITGGCTG TGGACACAGC CAGACCATAT TAGACTCATA ATTTGNCCTC  
 TGCACAGTAA GANCTGGGCT GGGATACCTC ATAGATCATA AACAAATCCG CACCCATGAA AAGATTTAGA GAGTCACACA  
 GGAAAGTCAA CAGAAGNCAG AGAGATGTGG GTCCTGGNCT TGCATGTCAT TAAGTGGTGG GNTCCTTCAG CTTTCACATN  
 TTCAGGCAGT GGGGTCAAGA AAC

SEQ ID NO:803: (Length of Sequence = 182 Nucleotides)

GAATGGCCTT NTCTAACGGC ATGTATGACT TGCATGANT CTCTAAAGCT GAACITGGCCT CACCTCANCC TGTCTTGCTG  
 GCAAATGCGG CCTTCAGTGG GAAAGTAAAT GGCAGCTGCT GTNATTACCT GGTCGNTGAA GAAAGACAGA TGGCAAAATT  
 NATGCCTGTT GGGGATGACA GC

SEQ ID NO:804: (Length of Sequence = 312 Nucleotides)

TTTATTTACT GCGTGTGTA AINATCACAA AACATATTCA TTGTCAAGTG AATGCACAGG CTTTCAAAGG TGATTGTATT  
 CTGCAAGGTG GGGAAATAGC AACTACCTTC TAAGGTGAAT GTNCAGCCTG CCAATTTCCAA CCCCAAACT CCTCTAGATT  
 CTCAACAGGG CAGCTTCTGC TTCATGCCCTC TMTTCGGAAA GGTACGCCCT GTGTAGAAGG CTTAATACCA ACATGCAGAT  
 CCACCTGAGA ATCACTGGAA TGCTCTGGAC CCAGCTGGAA TGCTTCGGGA ACCCAGTCAG GCTTNOGGAA AT

SEQ ID NO:805: (Length of Sequence = 411 Nucleotides)

CATGCAAAAT TCAGAATATA AAAAANTGCA GGGCCTGGTT GCCCACATAC ATTCCTCAGG TTAAGGTGGA TTTAAAGATG  
 CCCAACAGAA CCCAATGAAT CAGAAGCTAA AAGGGACACT TCAGTGATCA GCAGACGCAT TCTCTCACGT AACAAATGGA  
 GGGAAAGTGA GCACACATTA ACTAGCGAAG TCACAAGGCT AGATTAGGGG TGTACAGAAA TCTAATTCCT GGTGCTATTT  
 GCAACTACAT ATATTTAAAA TACANGGAGA TAAATACCCA GAACACATTA AGCCTACTGA TTTAAACAGA NCATTTCAAG  
 ACTGCTACAC AGAAAGGGAA GGAAGCTGT TAACCCAGCA CAGCAGCACA CCTCACATAT TTCCGTCTCA GAGGTAAAT  
 GGAAGGAAG G

SEQ ID NO:806: (Length of Sequence = 287 Nucleotides)

GCATTINAGT GCTGATACAG ATACAGTGAG TTCTTGCCCT TTCTCTCCT NIATATTGAA GGGATTATAA ATGAAGCTCT  
 TTAACATTC TGAGATCINT AAGTTGATTT CTACATGAAC TCCAAGTGGT GTTAATGACA TTTTCAGAAA AGATGCTTTA  
 CTTAGCTGAC AAGAAAAAGT ACTCTGTAG CCTTTATTTG TATGTGATAA AACAGAGTTG ATAAATAAT CTACTATTAA  
 CTTATCAATG CAGTCTTACA GAATCCACCT ANTTACAAAG TAGATAA

SEQ ID NO:807: (Length of Sequence = 369 Nucleotides)

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GGCAGATATA ACCTTTTCTC AAACATCTCT AATTGTCTGC ATACCCCACT AATATTGGCT ACATAATACA TTTATTTTTC  
 TCAATTTGGGA CTAAGTGCCT TACTTAGTTT TGINCAGTGT ATTCAATTAAT TGAAGAAATA CTTATTCAGG ATTTCTATTA  
 CTTAGTTTTG CTCAATATAT TCACTAATTG AAGAAATATT TATNCAGGAC TTCCATTATA TGAGCACTGG CCTTTGTGGT  
 ACAAAGATAC AACATGAATC TGAAACTCAA TTTAATCTAG AAAGATTTAT TAATATAANC TCATCAGAAA AGCAAGNCAT  
 CTACTGTGAT AGCTACAGTA TTGGTTAGAA ATGGAAAGAG AGAGCAGAT

SEQ ID NO:808: (Length of Sequence = 361 Nucleotides)

CAGGCTTTGT ACCAGCCGCC ATACTCTCCA AAAGATGTCC CATCCTTTIN CTTTCTTTG CATTCTTCTC TTTCTTCAGC  
 ATGCATCCAG ATGGGTTTAT TTTTCATCCT TACAGAACCA AACTCCCTTT CATGTGCACG AGTGAGAATC TCTTTGTACA  
 GTGTTTCTGC TTGCTTGAAC TTTCTTTGT TCAAATAGCA GGATGCCAGG TTATTTTTCG TCTTAGCCAC GTTGGGGTCA  
 TCAGGTCCCA GTTTTGTCTG GTAGATCTCG AGGGCTCTTT GATAATAATA TTCTACTTCT TCATACTTGC CCTGGGTTCT  
 GGCACAGTAA AGGCCAAGTT ATTTAACTGC TTGGCAACAT C

SEQ ID NO:809: (Length of Sequence = 353 Nucleotides)

CTAATTTATC TTCATGTCCA GTGAGCAGTG TTGCGTTTTT CTTGTAGCA TTGGAAATG ATTTACTGGA ATTACAAAAC  
 CTATTTTCCC TTAAATTTT AGCTTTGGCT CTGGCTGCTT TTTAGAATAA TGCAAGATAA AAATCACACC TGAGGGCTGA  
 AAACGGAGAG GGAATGGGAG ACTTGATATT TAAGCAGCTT GAATGGTTTT CCNTTNCCTT ATTTTAAAG AAATGCACTT  
 GCCTATGATA CTGTCTCTCC AGTGAAATGA TTAATCTCTC ATTACTCTAT TGATACANTA TTGTGCATGC TAGTGTGTGA  
 TTCTATACA GTAGCTTGAA AATTGATTAA CCT

SEQ ID NO:810: (Length of Sequence = 296 Nucleotides)

GAGGTCAATG CTTCCAGGC TCGAGTTGAT GCCCACAGGT GTATGTACG AGCATTGAAA GATCCAAATG CATTCTTTTT  
 TGACCACCTT CTTACTTTAA AACCAGTCAA GTTTTTGGAA GGCGAGCTTA TTCATGATCT TTTAACCATT TTTGTGAGTN  
 CTAAATTGGC ATCATATGTC AAGTTTTATC AGAATAATAA AGACTTCATT GATTCACTTG GCCTGTTACA TGAACAGAAT  
 ATGCAAAAA TGAGACTACT TACTTTNATG GGAATGGCA GTAGAAAATA AGGAAA

SEQ ID NO:811: (Length of Sequence = 493 Nucleotides)

CCAGGAGCTT CTCCTCTCTT GCCAGGGCTA TGAGCAGAAA CCTCAAATAA ACCCTGGGCA GAGAAAACCA ACTTAATGAA  
 GAGGACGTTG CTGTTTCCAC TGGCTTCTAA TTTTGAGAT GCAATGAGCA CTTACGGCTT TTGCAGTGGT TCAGGAAAAG  
 GCAAGAAGAA GCAGATTGTC ATGTTCCAAA GCCCTCIGAT GGCTGCATGG AGCCAGGGT GCTGTGACTT TTTTAAATAG  
 CTTCACTACC TTNATACGT ATGTCCTTAT TTAATCTTAA TCTATGCTCT CTTCTCCCA TCAGCCTGGG AGCTCCCTGG  
 GGCAGGTCTG TTTCTCCCT CCACTCCGGA NITGCGAGGA GCTGTGCCTC CCCCATCACA CTTGGAGGCT GTCINAAGGC  
 AGGGGCTGTG GTCCTGCCA TTAGACTNGA AGCTCCCCAA GGTTAAAGGT CATATCCTCA AAAAAGCTTA GAATAGCTTA  
 GGAACCTAGG GGT

SEQ ID NO:812: (Length of Sequence = 337 Nucleotides)

AAATTCACAT ACTGTAGT NATGCAAGCA AATTCTCACA TAATTATTTT TAAATGCTAG ATAGTTGGTA TAATTNCAAT  
 CATTTTAAAT ATGTTAAGAC TTGTTTGTGA CCTAACATG AGGTCTATNC TGAAGAATGT NCCATGTGCA CTTGAGAAGA  
 ATGACTGGAG TGTCCTTAT ATGTATGTA GGTCCAATTA GCTTATAGAA TTGCNCTAGT CCTCTATTTT CTTATTCANC  
 TTTTGTGG TTGTGINCT ATCCATTATT AAAAGTGGG TATTGAAGTC TCCTACTATT ATGTGTCTAT CATCCTCAGC  
 AACTAACAC AGGANCA

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SEQ ID NO:813: (Length of Sequence = 310 Nucleotides)

AGGTGGCCTC AGNNCAGCCA AGCTGACCTT GGCACCTGGC TGGCTTCTNT AAGGCANTAG AGTGCCACACA CATAAGCNCA  
 CCACCTNTCC CCACCTCCTC CCTTCTCTCC CATGCCACCC CACTTGCTTC CAAGGGCTTG GTTCCCAAAG TNACATCCAG  
 GGTGTAAGAG GTTGGGGAAA ACGTCTGCA AGNTGGCTCA GGGATCTNAT TCCATCAGAT GGTCTCATGA ATACTGTGGG  
 AGATTAAATC CATCTCAAAA TAGGCAACCA ATGCTATATT CTGAATNTNA GGTCTCTGGA CTGAGTCCCA

SEQ ID NO:814: (Length of Sequence = 361 Nucleotides)

GATTTGAGCC ATCAGAATTC AGCTTTTGTA GATAAAGAAT ATGAACATAAT TGACTATGGA TGAATTATT GTATATAGTC  
 AGCTTGCTGA ATTATTGGTT AAGCACTACT AACTATATCT TGGTAAACTA TGGTGCAACT GAGCCACCCC CTAAAAGCAA  
 AAGACATTTA GCAGTTCACC ATATTTTGCA ATTAACCAAA TGAGAGCCTA TGAGANTGAA ATGNTTTCAG GTGGAGTTTG  
 ACAATACAAT TCATCCNTAA TATATAGGGN NAAATATTTT CTCAAAAATA ACATCTATGT GGTAGGNCCT TAAAAACGAT  
 GGATGNAATG CATGCAAAAT TCTCTGGTAC ACAGACACAT G

SEQ ID NO:815: (Length of Sequence = 301 Nucleotides)

GAATTTNACT CTGTTTTCCC AGGCTGGAGT GCAATGGCAC GATCTTGGCT TACCGCAACC TCCGCTGCT GGGTCCAGC  
 GATCTCTCTG CCCAGCCTC CTGAGTAGCT GGGACTACAG GCATGCGCCA CCACGGCCAG CCAATTTTTC CATTTTNAGT  
 ACAGACGGGG TTTCACCATG TTGGTCAGGC TGGCTCTGAA CTCCCGACCT CAGAGGATCC GCCCACCTTG GCCTNCCAAA  
 GTGCTGGGAC TACAGGTGTC AGCCACCACA ACCGGNCTAA TTAATACTTC TTGAAATTTC A

SEQ ID NO:816: (Length of Sequence = 310 Nucleotides)

ATCTTTAACA TATTAAATA GACATGAGAA AAATGTGTCA TTTGATAAAA TGGGGGAAAT GTAATAAATG ATTACCAGAA  
 ATATAAAATT AAGCCGTATA TGCNCTTAAG TAAATCGAAT CTAGGCATCC TTAAAATGTA AAAAAGGNTG CAACAAGAGT  
 AAGNGCCCA GAATGATGTA AATTACAGGA ATGGGGTGTA ATGTAACCTC TAGAGGAGGT GATGTTTAGA AGAAGCAAAG  
 NGAATGCAAT GANGAAGCAA ACTTGTTTTA GGCAATNCT CCTGGGAGTG GGACCAGGCA GCCCCCTCTT

SEQ ID NO:817: (Length of Sequence = 225 Nucleotides)

TGGCATGCGC CTGTAGTCCC AGCTACTCAG GAGGCTGNGG CAGGAGAATN CCTTGAACCC AGGAGGCAGA GGTGCGAGTG  
 AGTCGAGATT GCACCACTGT ACTGGTCTCA GCCTAGGCAA CAGAGCGAGA TTCCATCTCA AAAAAAAAAA AAAGTTAAAA  
 NTAATATGCT AACTATGATA CAACTGATA GCAATATGT CTTTAGATTC AAAATAAAAA TAGGG

SEQ ID NO:818: (Length of Sequence = 225 Nucleotides)

TTAAAAAAC CTGTAGTTTC ATTACCTTTT TGAATAATGN CATACAAAAA ATGTATTTGN TTTTTTGTGC TGTGAGAATT  
 GATGTTTGTA GATTAATAAT CATTTTGTTC AGAATTACAA AATAGTTTTT AAATATTGTC TGAGAAAAGC CAAAGTTAAT  
 GCAACCNAGT GGAAACTGTA AGACNNTTG AGTATTGTTT GTTTTATTGG ATGCATTGG ATTTT

SEQ ID NO:819: (Length of Sequence = 280 Nucleotides)

TTGACTAGCT TCCTACGTCA TTAAAAATTC TTAAATAGT CTGTCTTAAT GGCTGCAAAT TTTGTCTGTA GTCTGGGCTA  
 AAATCTGATG AAATGTTTTC CCTGTGGTTC AGTAATTTAG CAACTCGTAT CTTTTTAAAA TATTACAACCT GGGNATTCTA  
 GTACGTACACA AACATTTGTA ATATCATTTA TTTTGTGCCA TTGTCTGTGC TATGAAATAC AGTAGAATGA AAATTTACTT  
 CAAAGCATTC ATINTCTTCC CCCAGGGAAT GATGGCAAAA

SEQ ID NO:820: (Length of Sequence = 328 Nucleotides)

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CCAGTTAATT TTGTAAAGTT TATAGNGATG GTTTCAGTTA GACCTGTGCT GTCAATACAC TAGCAATTCA CATGCACATT  
 TAANTTTAAA TCTAAGTTTA AATTTAAATT AAGTTAATAT TAAATAAGAT TTGAAATGCA ATTCTCAGTC CTACAAGCCA  
 TGCTTCAAGT GCTTCATATC CATGTGAGGT TAGTGGCTGC TATACTGGNT AGTGCAAAAA GAGAACATTA TTGTAATCAT  
 AGAAATCTTA TTGGTAAGTT TATGGGGTAG TACATGGACT AGAATGTAGT GAGGTAGTGA GCTGTGGATG CAGAGAAAGG  
 NCACTGGA

SEQ ID NO:821: (Length of Sequence = 310 Nucleotides)

TCAGCATGT TTTCTGTATG TTTTGAGATG AATTATTGGT TTCTTTTTT ATTGTGTTAA TTTGGTGAAT TGCATCANCT  
 TTAGTATCTT AAACCAACCT TGCCTCTCTA GGTAAACCT TATGTGGTCA TAATATATAA NCCTTTAAAT ACATTATTGG  
 ATTINCTTTT TTAATATATT GCTGAGGATT TTTCATGACT ATAATCATAA GAGATATTGG CATATGATTT CCTATACTTG  
 TAATGNCITT GTTAGAAGGA GTTTATATTA GNTTTATNC TGCCTCATA AAATGGGTTG AGAAATGTCC

SEQ ID NO:822: (Length of Sequence = 372 Nucleotides)

GCCAGATTGT NITCCTTGG AGCCCTGAC CCGGCTACT CTTCACCAGA CACGGCCCCG CTTTGGCCCCA CAACACAGCC  
 GTCCACCCC TGGTTCCTTC ACCTTAGCAG TAGCAGTAGC TCTGGGTGGA GTTGCCAGAG GAGCTGACAG GCCCTCTGCC  
 ACTGCTGCCA CCCCCAGGGC TAGGGAGGGA ACAAGAGCC TGCTTGCTGT GCTTGCACAT CCAGCATGCC ACAGCTGCAC  
 TACGGNGAGG AGGTCAGACA GTCCCCCAA CAAGNCCCCG ATCCCTCTNC TCTCCACCAG GGAGGGCCCT GGGCTTTGGG  
 CCCACAGNAC AAAACGTTCC ANCCCGGGCT GATCATTCTG GGTGGCAGC GG

SEQ ID NO:823: (Length of Sequence = 288 Nucleotides)

AGCTGGCATC CCTGGGGAAA ACCAACGAAC AGTCTCTCA CAGCCAAATT CACCACAGTA CTCCAATCCG NAACCAAGTG  
 CCCGATTAC AGCCCATCAT GAGCCCTGGG CTNCTTCTC CCCAGCTTAG TCCACAACIT GTAAGGCAAC AAATAGCCAT  
 GGCCCATCTG ATAAACCAAC AGATTGCGT TAGCCGGCTC CTGGCTCACC AGNATCCTCA AGNCATCAAC CAGCAGTTCC  
 TGAACCATCC ACCCATCCCC AGNGCAGTTA AGCCAGNGCC AACCAACT

SEQ ID NO:824: (Length of Sequence = 325 Nucleotides)

CTCCTGAGGT CAAAGCTGCA CGTGGGGAAG AGAAAGACAA GGAGACCAAG AATGCTGCCA ATGCTCTTNC ATCCAAGTCG  
 GCCAAGACCG CCACTGCAGG ACCAGGAACCT ACCAAGACGN CCAAGTCATC TGCTGTGCC CCAGGCCTCC CTGTGTATTT  
 GGACCTGTGC TACATTCCTA ACCACAGCAA TAGTAAGANT GTTGATGTGG AATTTTTCOA GAGAGTGGG TCTTCTACT  
 ACGTGGTGAG TGGGAATNAC CTTGCTGCTG AGGAGCCCAN CCGGGCTGTC CTGGGACGCT TTNTTTGGAA AGGAAAAGGC  
 TCACT

SEQ ID NO:825: (Length of Sequence = 318 Nucleotides)

AATCAGCCCT ACAGCGATTG CTCCACCCC ATTAGCAAAT ACCGTAATAT ATGNCCTAG TAATCATCCT CTCACAATTC  
 TNCITTTCTT AATTNNCCG TGAGTCAAGT TTCTTGACCA CAATGTTATG CTGAGGAAGA TCTAATGTTT TCCATGGAGC  
 AGAAATTGTT AGTCTCAAC TCCAAGGTCT GCCTTGTCOA GCCCTGTTN CCGTGTCTTC ATAAACCTTG TCAGGCATTT  
 ATTTATTCAG CACATATCTA CTGNTCTCTG CACAAGAAIT CATAAGGTTG TGATGAATTA TGTCCTTCT GAGTGGGA

SEQ ID NO:826: (Length of Sequence = 287 Nucleotides)

TACAGACTCA GGTATAGGG TGINATTTT TAAGTCAATA TTCAGTTTCA CAGCCAGAAT CTGTGAAGAG AGAACAACC  
 ATGAGAAAAC TAACANTTT ATGGTGATTG AGAGGTTCCA AGTNCCTGNN GTTTTAAAAA AATCAGTTTT TAAAGATAAA



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CAAACCTAAAA CTAGTCCAAG CACTGAGACA GAGTATTAAA AGATGGTAGC ACACCCAAAG NGCACGGTGG GTCTTGAATA  
GCTAACATGT TTCAAGTAGT GGAGGNAGAT GTGCTTAAAT AGTTACC

SEQ ID NO:827: (Length of Sequence = 426 Nucleotides)

TTTTTTTTGT TTTGGGACAG AGTCTCACTC TGTCACCCAC GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA CTGCAAGCNC  
TGCCCTCCCGG GTTCATGCCA CTCTCCTGCC TCAGCCTCCA GAGTAGCTGG GACTACAGGG GCCCGCCACC ACGCCCGGCT  
AATTTTTTTG TATTTTTAGT AGCGACAGGG TTTCAACGTG TCAGCCAGGA TGGTCTCGAT CTCTGACCT CATGATCCAC  
CTGCCTCGGC CTCCCAAAGT GTTGGACTAC AGGCATGAGC CACCGCGCCC GGC CGGATGG TTAAACATT TTAAAAATAA  
ATATTTAGTG CTAAGACAGG ATATGGAGCA ACAGGAACTC CTATATGCTT GCTGGTGGG AATGCAAAAT GGGTACAACC  
ACTTTTGGGA CAAACAGTTT TAGTAA

SEQ ID NO:828: (Length of Sequence = 402 Nucleotides)

GGCTGCTTGC TCCACTCAAA CAGGTATCTG GGAGCCAGCA CTCTGGCAGT CCTTCTAAGC TCTAACTCTG GTTTTACTGT  
TTTNNAGGTG AAACCTTTGT CCTGGGGAAT AGTCTGGCCC GCTCCTTGGA ACCACACTCA GACTCAATGG ACTCTGCCTC  
AAATCCCACC AACCTTGTCA GCACCTCCA AAGGCACCGG CCTTGTCTT CATCTGTGG CCTCCACCA AGCACTGCCT  
CAGCTGTGCG CAGGCTATGC TCCAGGGGTA AGCTTACCAG AGTCTGGCC CTNCTTCCCT CCTCACTCT TTCTTCACT  
TCCTTCTGA GCTCTGGGAG GCCAGAGAGG ACCTAGCTCT GTTGCCCTCT GNTCTGTGGT GGGGACTAGG GACTGGACTT  
AA

SEQ ID NO:829: (Length of Sequence = 417 Nucleotides)

ATCGGTIAGG AGTCGGCTTT ATGTGGGAAG AGAGAAAAAA ACTTGGTGAA ATGCTTCTG GACTAATTGA AGAAAAATGT  
AAACTACTTG AAAAATTTAG CCTTATTCCA AAAGAGTATG AAGGCTATGA AGTACAGTCA TCTTTAGAGG ATGCCAGCTT  
TGAGAAGGCG GCANAGAAGC ACGAAGTTTG GAGGCAACCT GTGAAAAGCT GAACAGGTCC AATTCTGAAC TTGAOGATGA  
AATCCTCTGT CTAGAAATAG AGTTAAANGA AGAGAAATCT AAACACTCTC AACAAGATGA ACTGATGGCA GATATTTCAA  
AAAGGATACA ATCTCTAGAA GATGAGTCCA AANINCCCTC AAATCCACAA ATAAGCTTGA AGNCCAAAAT CATTCTINGCA  
AGGTTTCTTC CCAATGG

SEQ ID NO:830: (Length of Sequence = 404 Nucleotides)

GGTTTGAGAG TAGAACAGGA AGTTGTGAGT AGAGCCTTGA AGGAAAGAGA ACAGCAGGTG CATGGNTCCC CAGGCAGGAC  
TCAAGGTAGC CACTCAGGCA TCAGAAAGAG TCAGGCGGCC ATGATGGCTC ACACCTGTAA TCCCAGCACT TTGGGAGTCT  
GAGTCGGGTG GNTCACCTGA GGTCAAGAGT TCGAGACCAG CCTGACCAAC AGGGTGAAAT CCTTCTCTA CTAAACTACA  
AAAATTAGCC AGGTGTGGTG GCACATGCCT GGGACAAATT TGGGATCAGT GTTCTCCAGT CTGAACATAG TCTTCTGTAA  
CCTGGGAGAG AGTGGTCAGG TACTTCCAGC TTCAGGGCAG CCAAAAGCAT TGACAAAACG ACAGGTAGGA TGGGGGGAGT  
AAGT

SEQ ID NO:831: (Length of Sequence = 330 Nucleotides)

AATTTACAG GTTGTGCTT CTGAAATCTG TACCTTCTTA CTCATAACAT TTAATGTAGC ATTTCTCAAC CTGACCAATC  
TGCAAGAAAT ATATGTCATA TATTAAATGT GTATACATGA ATATATGCAT TTTCCTGGTA AAAAGTCATA GTTTTNCATA  
GATGTCATGT AATCTTTTAA GAGATTCTCA AATAGGAACA TGATTCCACC CCAATAATGG TGAAAAATGA TCAATTTAGA  
TGAAAGGGAC CTCAACAAGC CTCTTGAGAT ATGAANCATA AAGAGNAAT ATAAGCCGCA ACTTTTTGAC ATGACAGATT  
CATAATGGTT

244

SEQ ID NO:832: (Length of Sequence = 402 Nucleotides)

CTGTTTCTC CTTTGTITT CCTATTATN CTCCAGTGC TAACITGATA TCINCTGTG TGTACACGTG TGINIGTGTG  
 CAAATATATT TCTAGGAACA AGAGCAAACA TTCTAGTAAC TATCATTCCTC TGATGTGGAG AACITGGGCA GAGATCTGAG  
 TTACAGCTTT GTGGATTAT TCTCTCTGAT GAGAGATCGC CCCTTAGAAT GTCATGGTCC TAACCCCGTC ATGGATACCA  
 GGGGTGAATG GCAGGGTCTT TCTCCTGCCC AGGAGGAAGG GTATGGGGAG CCGGTGCATC TTGACTGTCA GGTCACTGT  
 CTTACCACCT TTACAGCTAG GCTTTCTGAG GTGCCAGGT CTCCTGGGAA TTCAAACGT AGTTTAGAGG CAAGCTGGGT  
 GA

SEQ ID NO:833: (Length of Sequence = 398 Nucleotides)

AGCCTTTTTT CAGAGATCAG ACCTCTTTAG ACATCTGAGA NITCATAACAG GAGAAAAACC TTATGANTGC AGTGAATGTG  
 GAAAAGGCTT CTCCAGAAC TCAGACCTCA GTATACATCA GAAAACATCAT ACCGGAGAGA AACACTATGA ATGCAATGAA  
 TGTGGGAAGG CTTTACACAAG AAAATCAGCA CTCAGGATGC ATCAGAGAAT CCACACGGGA GAGAAACCTT ATGTATGNC  
 TGACTGTGGG AAGGCCTTCA TCCAGAAATC ACATTTCAAC ACACATCAGA GNNITCATA TGGAGAAAAG CCGTATGANT  
 GCAGTGAATG TGGGGAAATC CTTTCACTAN GGNAGTCACA ANCTTCCATG TGCATCAAAG GNTTACANC CGGGGAGG

SEQ ID NO:834: (Length of Sequence = 394 Nucleotides)

CTTTTTGTG AGTCGTAAA ATCATTTCOA GGTAAATCT AGAGCTTAAT CCATATGNG TGCCATCTTT TGCTTTTCCA  
 CACCTCINAT CCTAGGTAAG TNAGAGCTAA CGAGTATTIN CTGAGCTTCT ATTATGGGCC CAGCATATGT NATAATTCTT  
 TTTACACATA GGAATCTGAG GCTTAGAGAA GTTTACTGAT TTACCTAATG GCACACCATA AGINCTGGGG CTAAGATTTA  
 AACTCAGGTC TCTGACTTIA ATTCAGATGG TCAGCTCGAT GGTAATCATA ATAATATTGT NGTGTGTGTT GTTGTGTGTA  
 TNRATCAACA ATAGTAGTAG CTAAGTCCAT TTCATGAAAC AGCTCATTGG ATAGTCCCAT NTGGATAATT CTGA

SEQ ID NO:835: (Length of Sequence = 422 Nucleotides)

GCTTTCGCC TCTATAGATT TGACTATTCT GGACCTTTCA CATAAACGGA ATCATGTAAT ATATATAATA AGCAAAAGGT  
 AACAACAACC AAGCTGGCAA TTTGGTGTGAT GAATGANTAA ACAAAATGTG CTGTATCCAT ACAGTGGAAA TATTGGTGCC  
 TACTACATGT GGATGGACCT TGGAAACATC ATGCTGAGTG AGAGAGAGCC TTGGTATTGT TTCATCTCCC CAGGAGATTC  
 CAAGGTGCAG CCAAGGTGTA GACCCACTGA CAAGCAATGG ATATGGTGTG GTGCAGATGA AATAAGGCAG CCAGGGGCAG  
 GAGGGATGTC TCATTGAAGA TGACTGTTT GTGGGATGCC TAGCAGGGGT GGGGGGATGA GGTATTGATA ACCAGCAACC  
 CCAATCTTCA ACACAGCGTG GA

SEQ ID NO:836: (Length of Sequence = 408 Nucleotides)

CTCAAAAGAG TTGGCATCTC AGAAGGGAAG TGTAAGTINAG ACAATTGTCA TTGATGATGA AGAGGACATG GAAACAAATC  
 AAGGGCAAGA GAAAAATTCC TCCAATTTTA TTGAACGAAG ACCTCCTGAG ACTAAAAACA GAACCAATGA TGTGGATTTC  
 TCCACTTCCA GTTTTCAAG AAGTAAGGTA AATGCAGGAA TGGGTAATAG TGGTATCACC ACAGAACCAG ACTCTGAAAT  
 TCAGATTGCT AATGTTACAA CTTTAGAAAC AGGTGTAAAGC TCTGTGAATG ATGGCCAATT AGAAAATACT GACGGGCGAG  
 ATATGAACTT AATGATTACA CATGTAAACA TCACTGCAGA NTACCCACTT GGGAGGATTG TCTCTAACCG GGACTGCAGT  
 CCAAGTAA

SEQ ID NO:837: (Length of Sequence = 347 Nucleotides)

TCGCTCTGTT GCCCAGGCTG GAGTGCAGTG GCACGATCTC AGCTCACTGC AACCTCTGCC TCCCTGGGTTT TAGCGATTTG  
 CCTGCCCTCAN TCTCTCAAGT AGCTGGGATT ACAGGCATGC ACCACCACTC CTGGCTAATT TTTGTATTTT NAGTAGAGGC  
 GGGGTTTTGC CATCTGCCT AAGCTGGTCT CGAACTCCTG GCATCAAGTG ATCCATCCAC CTGGTCTTC CAAAGTGCTG

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GGATTACAGA CGTGAGCTAC TTCACCTGGC CTGTGTGGCT CTTTTTCAAA AAAAGTTTAC TNGACTCTTG CTTTATTGCA  
AGTCCCAGAA TGGATTTGAT TTAGGGA

SEQ ID NO:838: (Length of Sequence = 275 Nucleotides)

AATTGCCAAG GAAAATTTTA TTTTAGCTTT GCATTAACAT ATTCTAAATA ATCCTTTCAC TTAATGCAAT CAGATTCTCTG  
TGACAAGCCA AATACTTGTT TTTTGTGTG TGTGTGTTT CCCCTCACIT TTCATTGTAT GCCCTTCAGA AAAATCTGAG  
AAGTGGGCTT CCATTTTGA AAAACAGGAC TTCCTTAGTA CCATAGATAC GTAGATTGCA ATTTCCTTT TCCTGCAGCA  
TACTGACCT TGTGAAATGA TGCCTATGGA TACGG

SEQ ID NO:839: (Length of Sequence = 387 Nucleotides)

TTTTTGINIT GTGTGTAGAG ACTGGGTTTT NCCATGYNCC CAGGCTGGTC TTGAACCTCT CGGCTTAAGC NATCCTCTCTG  
CCTTGACTTC ACAAAGTGCT TGANTTACAG GTGTGAGCTA CCACGCCTGG CCATGTTTTT TGTGTGAAG GATCTGTTTTA  
GTTTTATATC TTCTGTGGC TCATATCTAA TTTAGTTGAC AGTACCTGTG GGTCACIAGG TAGACATTGC TAGCAGACGT  
TTAGAAATGA AATACTAGAG CTGCGGAAAA AGTTGATATT TGAGATAGAG ACTTGAAGAA CATTAGCAGA GAGTTGGTAG  
TTAAGGTCTG TGAGCTGGTG AGCAATTCAA AATAAAAGCA GAAGAGAAGA GGAAGACAAG GTTCAAC

SEQ ID NO:840: (Length of Sequence = 367 Nucleotides)

GTACTAAAGC CATGCAGGAA GGAGGAAATA ATCAGTGAGC CACGGGCTGA ACTGTGGAA AAGAAATGGA GGGCAAGGTC  
ACAAACCACT CCTAAGTGC TTCTAATTTA ATGTAATCCT CACTGTTTTG CATTATGCT TTINATGGCC ATGAAATCTG  
TTTTTCCCA GINCTCTAGT GTAATTGGA ATTAATTTCC CAGCTGCTTT ATTTTTTTCC TAGAAGAGTC GGGGACATTT  
TCAGGATTAG TAGAGGTGTT TCTACAACAC CTTTCATGCCT TCGATAGTGT GTAAGAGTTC ACCAATTGAN TTACCTTATT  
CTGTTTCAGAA GTAGTAACTA TGGAGTTTAA CCACTCTGGG ACATAAT

SEQ ID NO:841: (Length of Sequence = 346 Nucleotides)

TGGAAAGGAA AAGCAAAAGA TTGAAGAATA AAAACATTTT GTATTTGCCA AACTGTGNC TGTAGCAGTA AGTGTGAAC  
AAGTTTGCTA CATTTTCCTT TTTGGTTTTA CTGGTTGGG GCTTTTTTGT TTGGTTGGTT TTAAAGGATT TAGGGGATTG  
GCAAGTCAGT TTGTGAGATG TCAATGAACA GAAAACCTAA GAAAAAGGT AGCAAAAGTN CTGCTGGCCC CAGATGGATT  
TTCCTTAAG TAATTTCTTA ATCATTAGTT ACAGCTCTGT GTCAAAGAT GTACATAGAA ATTTATGCTA GATTCTTAAC  
ATCTTTCCTT ACTGTGTGCA GAAATG

SEQ ID NO:842: (Length of Sequence = 326 Nucleotides)

GTCTTTTGAA ACAAACGAGA ACAAAGACAC AACATACCAG ANTCTCTGGG ACACATTCAA AGCAGTGTGT AGAGGGAAAT  
TTATAGCACT AAATGCCAC AAGAGAAAGC AGGAAAGATC TAAATTTGAC ACCCTAACAT CGCAATTAAA AGANCTAGAG  
ANGCAAGAGC AAAGACATTC AAAAGCTAGC AGAAGGCAAG AAATAACTAA GATCAGAGCA GAACTGAAGG AGATAGAGAC  
ACAAAAAACC CTTCAAAAAA TCANTGATTC CAGGAGCTGG TTTTGTAAAA GTTCAACAAA ACTGATAGNC CACTAGCAAG  
ACTAAT

SEQ ID NO:843: (Length of Sequence = 380 Nucleotides)

GGCCTTCAAA TTACAAAAAG CAATTTACAT TATAGTAATA GTTCATGTTT ATAGTACAGG AACAAGAATG AGTTAACTA  
AATATTCCAA ATCAGTACAA GINATNCCT TTTTTTTTTT TTGAGACAGG GTCTCACTCT GTACCCAGG CTGTCTGTCT  
TTGTATCCA GGCTGCAGTG CAGTGGAGTG GTCACAACTC ACTGCAACTT CAGCCTCTCTG GGCTCAAGCA AGCCTCCCAC

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CTCAGTAGCC TCCACTCCT GATTAGCTGG GACTACAGTG AATGTGTGCG CATGCCCAGC CTAGTGGTAT TTTTAACAGA  
TAANTAAGAA TGGAGGTAGT GGCAGAGGTG GAGTGAGAG AGAGACANGT AAAATATAGG

SEQ ID NO:844: (Length of Sequence = 257 Nucleotides)

TTTCCCTCTC GTTGCCCAAG CTGGAGTGCA ATGGCGINAT CTTAGCTCAC CACAACCTCT GCCTCCCAGG TTCAAGCAAT  
TCTCCTGCCT CACCCTCCCG AGTAGCTGGG ATTACAGGCA TGTNCCACCA CGCCTGGCTA ATTTTINTATT TAAGTAGAGA  
TGGGGTTTCT CCATGTTGGT CAGTCTGGTC TCAAACCTCT GACCTCAGGT GATCTGGCCA CCTCGGCCCTC CCAAAGTGCT  
GGGATTACAG GTGTGAG

SEQ ID NO:845: (Length of Sequence = 420 Nucleotides)

CTACACACAT CTTGCATTAC CTGGCAGTAA GCTTGGAGAG TAAGTTTTGC AGATGCAGAT CAGAAGAGAT TAGGAAGAGC  
TTTGCAGATC ACCGCAAGTA TTTGTATTTC ACTCTAAATT AAACAGAAAA CCCAGGAAGG GTTTTAGGCA GATAAATGGC  
ATTATTTAGT TTCTGTATTT AAGTCATCAT TTAGGTTACT GGGGGAGGCT GCCTGAAGT GGATCAGAAG TAAAAGGCAG  
AGATAACCAGC TAGGAAGCTG TTGCAGTGAG CCAGGTGAGA AGAGAGGGCC ACCTGGACCA GGTAGAAGCA GTACAGGTGA  
AAAAANTCAG ACACTTCCAA ATCTTCTCA AGATTNATA CATTATTTGG CTGGGCACGG TGGGCTCACA CCGTAAATC  
CCAGCACITT TGGGGAGGCC

SEQ ID NO:846: (Length of Sequence = 215 Nucleotides)

GNCTGGGTGA CAGAGTGACC CTGTCTCAA AAAACAGTGA TTGTTGTAA GGAAATTATT AAAACCTTGG TTCAATATCC  
AATATCTTAA CTTTAAATTT TCAAATACIT CAAACTAGT AAGTATTACT ATGTCTAAAG CACAGTGCAG TCCAACGGAN  
TATGTAGGCC ACATATATAA TTTTAAGTAG GCCAGTAGTC ACAATTAATAA GAAAA

SEQ ID NO:847: (Length of Sequence = 266 Nucleotides)

ACACGAAGAA TCTCTTCAT CGCCAAACAG CTTTCAGAGA TAGATGCTTT GTTTCCAATC GAGCATGCTA TTCCAGTGTA  
CTGACATAC TGTAACCTC GTGTTAGGCA CCTTTATGAA GAGATNAAGN CACTGGCATT TCAGTGGGAT TTTAAGCATT  
TTTAATAGCT TCATGTACAG CATGCTGCTT GGTGNACAAT CATTAAITCT NCGATATTTC TGTAGCTTGA NTGTAACCGN  
TTTAAGAAAG GTTCTCAAT GGTTC

SEQ ID NO:848: (Length of Sequence = 275 Nucleotides)

CNCCTCGGTC CCCTTTTAAA AATTACTTTT CAGCCGGGCA TGGTGGCTCA NGCCTTGTA TTCCAGCACT TTGGGAGGCT  
GAGGTTGGAG GNTCACCCTGA GGNCGGAGGA TTGAGATCAG CCGTACCAAC ATGAAGAAAC CCGTCTCTA CTAAAAATAC  
AAAAATTAGC CGGGCGTGT GGCACATGNC TGTAAATCCAG CTACTCGGGT GGCTGAAACA GAAACCACCA ACGNCTGACC  
TCAGGGAGAT GTCTAAGAGC TTCTGGCATG CCTCA

SEQ ID NO:849: (Length of Sequence = 318 Nucleotides)

GGAATTTTNC TAGTGAGGAG TGGAGGAAGG GGGCCTGGTG GAGGAGTAGC AGCCTTTNCA AAGGCCCTGA GGCAGGAATA  
CCTGGGAAGT GGGGGCGTGC TTGINTAAGA TGAGGCTAAA GAGGAAGGCG AGGCTTTACT TAGGAGGAAT GGAAGCCAC  
TGAGTGTAA AATTAAAAGC AGTNGGGGCT GGGCACAGTG GCTTACACCT ATAATCCAG TACTTTGGGA GGCCAAGGTG  
GNITGNTCAC CTGAGGTCAA NGAGTTTNG ACCAGCCTNG CCCAACATTG GGCTCTACTA AAAGTACAAA AATTAGCT

SEQ ID NO:850: (Length of Sequence = 320 Nucleotides)

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ATGTCCTGCCA ACTCAGGAGC AGGGCAGGAA TCAAACCTTTT TGGAGTTGCT ATCAAGTNCCT TGATTTTINCA ATCCCAACCG  
TCCGCAGAAC ACTAGATGTG TGNATGINTG CTGTGTGTG CATTGTGTGT AAAGAGGGGG TTGAGAAGTG GAAGGCAGAG  
NCAGGAGTNG GCATCTACCA NGGCATACAT NAAAGACCCT TACACCAACA CTGCCCTTCC CAGNAATGTG AGTGTATCT  
GGTTTCTTAA AACCCCTGGGC TGCAGTCCAG ATAGTCATGG TTAGANCAGA TGGTTGAGGA AAGGTTCAAG GCAGTAGGAT

SEQ ID NO:851: (Length of Sequence = 170 Nucleotides)

CATCCAAGAT ACCAAGATAT ATGAGGGAAC ATTTNNTTTA ATAAAAACA CAAAACCACA AATCCAAGAG GCTCAGNTAA  
CCCCAAGTAA AATATATACT AAAATACAAG NAAAAGGGAA AAAATGCATG NACACACACA TATAGGCATA TCATATTCAA  
ACAGTTGTTA

SEQ ID NO:852: (Length of Sequence = 256 Nucleotides)

CAAAGTACAC ANGTGTATTT ATTACATTTT GCAAGCACTC TGTCTACAT TTCAAAAACG CCACNTCAA GCTGTTGGCA  
CATTTATGTA CAAAACAGAT TAATTGTAAT GCCTGCTACA AAGCACTCTG TGAAAATACA AACTCTAATA CCAGAAATAA  
AAGCCAAAAG TGTCAACATC ATTACATAAG TNGAAAAGTC AGTTTNGAA ATTATCACA ACTGTTATGN CACGGAAGTG  
AAATACTATA ATATAG

SEQ ID NO:853: (Length of Sequence = 281 Nucleotides)

GTATGINTGT TCTCTCTCT TGTCTCTCT AGGATATTIN ATCCTTGACT TTAGGGAGTT TGATTATNAA ATGCCTTGAG  
GTGATATTT TNGGGTTAAA TGGGCTTGGN GTTCTCTAAC ATTCTTATAC TTAGATATTG ATATCTCCTT CTAGGTTTGG  
GAAGATCTCC GTTGTATTTC TTTTGAATAA GCCTTCTACC CCATCTCTTT CTTTATCTCC TCTTTACAGC AAATAAAGTT  
TTAGANITGC CATTTINAGG CTATTTTCTA GACCCGTAG G

SEQ ID NO:854: (Length of Sequence = 255 Nucleotides)

TCTGTCCAGG ATTATTACCA GCTAAACCAN GTAATGGAGG TCTATGCCTG ATGAAGAACA CCTGTAAAAG CTGGAATG  
TGGCTGTCTT CTCAAATGGG CAGATACCAG CACAANGATA CAAGGATTGT AAAGACTCAG AATCATGTTA CTTCCAGAAG  
AAACTANATA AGNTCCAACA ATGAACACAA NATAATANAA CTNAAGGANA TTTGGANAAC ANTGCATAAA CAAAACAAGT  
TTAATGAATG ATTAG

SEQ ID NO:855: (Length of Sequence = 333 Nucleotides)

ATAGCTGTGG TGGTAACCCA CCAGAGTGAG CATGCTTNCCT TCINAGGATA GACGTTGGGT AGTGGGATTG GGGAGAGGCA  
GGACAGAGGC TTCCGTTGTG TCTCTCTAAT TCATTGTTTC TTAAAAAGGA TTTGGGCTTA CAAGTTTCAA ATACTAAGAT  
TTNATAAAGT CACATGGATT TTAAAAAATC ACTCTATTGT ATGTTTGAAA CATTCATAA TTAAATAAA AGGATTGGTA  
TTATATATGT NCTTGAGTTG CTATAATGTT TTACGGTTTT CCTTTGCTC ACTTTTGAAT TNINCGAGGA TCTCCTGGGG  
GAAGNITCAG TCG

SEQ ID NO:856: (Length of Sequence = 230 Nucleotides)

TTNAGACAA AGTCTTGCTC TGTCACCCAG GCTGGAGTGC AGTGGGCGAA TCTCGACTCA CTGCAACCTC CACCINCTGG  
GTTCAGCNA TTCTCTGCC TCANCCACCC AAGTAGCTGG GACTACAGGC ACGTGGCACC ATGCCGACT AATTTTTTGT  
ATTTTTTTTA GTAAAGACGG GGTTCACCG TGTTAGCCAG GATGGTCTCG ATCTCCTGAC CTCATGATCT

SEQ ID NO:857: (Length of Sequence = 334 Nucleotides)

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AAAAACAATT AGTAAAAATT ATGCATTAAG GAATTATTTA CTAGACTTTC TGGAGTAAA AAATAAGTCA GCTGGTTTTC  
 CCTTIGANTT CCTATATAIT AAGGCAGAAT TCTCTATACT GTCCACCAAA ATCATAGTTA CAACTGTTTA CTTGAAATGA  
 TTTATATACT GCATTGACCT GGCATGTTAA TATTINCCTA TAAATATCAC CACTTATCCC CATGCCCTAA AGCAGTTTTT  
 TTAACCCAT TCTTCTTGG AGAATAATTA TAATACCTTA AATACAGAAC TTTGGGTTTC TGATCTTGCC ATAGCCATGT  
 AGCACAGCCA CTGA

SEQ ID NO:858: (Length of Sequence = 301 Nucleotides)

GGAGAAACGC CTAATGTAGA TGATGGGTG ATGGGTGCAG CAAACCACCA TGGCACGTGT ATACCTATGT AACAAACCTG  
 CACGCTCTGC ACATGTATCC CAGAACITAA AGCATAATAA TAAAAANTA AGAAAATGGA AATTGATTTT AAAAATTTTT  
 ACAATGTGCA TCAAAGACA ACATTAAGAA AATTAACAGA NTGGAAGAAA ACATTGCAA ATAATTATC TGATGAGGGT  
 TTAATATCCA GAAAATATAA AGANCTCCTA CANCTCAACA GCAANAAAAG ACAACCCNAC T

SEQ ID NO:859: (Length of Sequence = 332 Nucleotides)

TGTCTCACC CATAGAGCTA TCAGAGGGTG CTGCONATTG GCAGACCTT TACATTTCCC TTTAATAAAT CACTTCCCTG  
 CCAAGATCTC TGTCAAGGTT TGAGAAGTCA GAGCAITTAAG TTATTINCAA TAAATGGTAT GTACATGANC ATCAGCAAGC  
 TCCAAGAAAT GACTCGAGGG CCTTINACTA CTCAGAGAAT AAAGCAAAA TGCCAGGTTT TCAGTGCTTG TCCTTTGTGC  
 CAGGGATTTG GACGTGTTTT TTGTTAAGIN CCAGCGTTGA GCTATGTTCC AGAAGATGGA GCCTTCCAGA AATTAATGT  
 AGTGCTTGAA GG

SEQ ID NO:860: (Length of Sequence = 233 Nucleotides)

AAACGNTATG TGATTTTAGC ATTACAACAG TAATTCAGAA ATATCTCANN TGTTACATTG ATGTCATCAN TATTACAAAA  
 AAGGAAAAAA AAGTGACAGG CAACAGTGAA GAGCACCAGA GACCCAGCGC ACACCTAAAG TAGACCATGC TTCTTTCCTT  
 CCACTGCCAG GTTATCGTCC CGGGAAGCCC CCCACCCCT CGCTTCCTC CTCCGCTTTC CCTAAAAAA NNG

SEQ ID NO:861: (Length of Sequence = 327 Nucleotides)

GGGCAGGTGT CAGCGCCCGT TTCACCGCCA CGTCGCGGAC ATGGTGATTT CAGAAAGTAT GGATATACTC TTCAGAATAA  
 GAGGAGGCCT TGATTTGGCT TTTCAGCTAG CTACTCCTAA TGAAATTTIN CTCAAGAAGG CACTGAAACA TGINTTGAGT  
 GACCTGTCAA CTAAGCTGTC TTCAAACGCC CTGTGTGTTCA GAATTTNCCA CAGTTCAGTG TATATATGGC CTAGCAGTGA  
 CATAAACACC ATTCTGGAG AACTGACTGA TGCTTCTGCT TGTAAGAACA TACTGCGCTT TATTCAATTT GAGCCAGAAG  
 AAGATAT

SEQ ID NO:862: (Length of Sequence = 378 Nucleotides)

AATCAGGTCC ACATTGTTGT CTGGATGCT GAGTTTGCTG AGGGTTTCCA AGACCACTCT CTGCGGGGAA AGGACGGCAT  
 TGGGGCCCGAG GGTGGAAGG GGTCTCTGG CTTCANCTGA AGGGCAAACT GCCCAGTGTA GGAGTCCGTC CAGGACAGGC  
 AGGCAAATNC TCTCGGGTA TGGAGATAGG TCCAACAGCC CCGAGATGTT GGCAGTGTA ACCAAGGTGT TTTCCCGGAG  
 CATCTCCAAG CAGTCCCACC ACCACTCCAC TTTTGTGAG CTCACCCCTT GGTCCGTTT CTNCTCCTT TTCATAAGTT  
 AGTGGTGCTT GCTTCCCGT TCTGGTGCT TTGTTGGTGC AGCAAGGATC AAGCTTTG

SEQ ID NO:863: (Length of Sequence = 374 Nucleotides)

TCAAATTAAT GGTTTTATTT CCATCTGTAA CACTAGCAGA GGAGTCCAAA GCAGACTGAT ATCCATGGAT ATAGTTTAA  
 TGTAACAAAG AAAGAGTTGA ACTATGTACA TTGAAAAAG GAAAGACATT TTNCATACC AACCTTCCC TAGTTCGCAG  
 TTTCTGAATA GTAGAAACAA AACACATTTT TAAATCTTTC TATCAATTTA ATTTAGGACG AAGTAACACA ACTTTTATAA

TTAACCACTG AAGTNGTCTT TAAGGACAAA ACTTAAATTT TAAATGGGT GTTACCATAT TTINATGAGTG GACTGACTCC  
AAGGTGCGCT TGCTCCAAGN NTGGGCATCG TGACATTGCC GTGATGCCCA GAGG

SEQ ID NO:864: (Length of Sequence = 223 Nucleotides)

AAGGGGATAG AGCAGACACT CCGCAGGTNT CTTGAGATTA TCATCCGCTG AGGGTAGAGC TGAGGGTGGA AGGGGAGTNA  
GCAGACACTC GGAAGGTGTC TTNAGGCTCA GGGAGTTATC AATTATAGAA TGTGTGTGAG TTGGAGGAGG TGGCTGGTGG  
CCCATCCTGT TTTTAAAGT TTCANCTGTG AGGTAGGGCC AGTAGGGCAA TCCTGAAGAA TGG

SEQ ID NO:865: (Length of Sequence = 228 Nucleotides)

GAACCCGGGA GGCAGAGGTT GCAGTGAGCA GAGATCACAC CACTGCACTC CAGCCTGGGC AACANAGCAA GACTCOGTCT  
CANAATTTTN CCAAATCTG ACGGAAAGAA AAGAAACAAA TGGTTCAGAT GGGACGGAGG GTGGGGGAGG GGGGGAGGGT  
GAGTAGGAAC CAGGAGGGCT GCCTGGGGTG GGGGAATAAN TTAAAAAAG GAACGAGTTA ACAACAGC

SEQ ID NO:866: (Length of Sequence = 328 Nucleotides)

GCACCACGTC AGAGAGGCCC CAGGCCACTG AGCCCGGGAG GAGACCCAGC CGGCCAGCCA GATGTGTGCC TGANTGCCAC  
AGACTTCAAG CAGTTTACAA ACGAACTCA CTGTTAAAAG CTGTTAAATC TCATTAAAC AGTAGACGAG TGCTTTAGAT  
TCTCTGAATA TCAAATAATA TATACAGATA GACACTGAGA CATGACAGTC TAATCTAAG CATCTTTACA GATGCATTTN  
CTTGAAAAGT TAGTCTTCTT TTTAACTCTG AATCAGTGAT AAAATTGTTA ATTTGCAAAA GAGTACAGTT TTAAGCAAGA  
NTAGATG

SEQ ID NO:867: (Length of Sequence = 361 Nucleotides)

GTTCATGGC ATGINAAAT TATGTGAAAT TCAAATTTTA GTGTCCCGAG TTCTACTGGA ACGCAGCCCC TATGTGGTTC  
ATGINTTGCC TCCAGCTCCT TTCACACTGC AGCAAAGCAG GGAGTGTAAC GTACACCCCA CGGCCACGGG GCCTAAATA  
TTTCTATCA GACCTTTAGA GAAAAATATG CCGACCTCGG ATGTGACTGA GGGTGGGGAC TTGGGTGAAT GCGGGCCAGG  
AGTGACATCA AGGGTTTGAA GCAGACCTC TGTCCAGGAG GGAGCGGAGG CAGAGCAGGG ACAGTAGINA GGAGGCCATC  
TGTGGTGACT TAGGCAAGGT GAGGAGGATG TAGGAGGCAA G

SEQ ID NO:868: (Length of Sequence = 364 Nucleotides)

AAAGCAGCGT TCAGGCTACT CTCTCTTGGN TCCTTGCTCT GGGGAAGAAC ACTCAAGCAG CTTTAGAAAA AGTCCACGTG  
GCAAGGAAT GTGGTCTTTT GCCAACAGCC ATGTGAGTNA TCCATCTTAA GAGTGGNTCC TCCAGCCCCA GTAAAGTGT  
CAAATGACAG CAGCCCTGGC TAACATATTG ACTGCAACTT CATCAGGGAA CTTGAGCCAG AAAAAGTCAG CTAACCTGCT  
CCTAAACTTC TGACCCACAG AAATGGTGAG ATAATGAATG CTGTGTTTAA GCTGCTAAGN TCTGGAATAA TTTGTATTTC  
AGCAGTAGNA TAACTAATAC AANGCCACCC AAGNATCATT TCCC

SEQ ID NO:869: (Length of Sequence = 383 Nucleotides)

AGCGACAGAC AAGTGAGCAT CACTACCAGA GCTCTGCCTC CTGTGAGATC AGTAGCGACT TTAGATTGTC ATAGGACCAT  
GAACCTGTG CATGCGAGGG ATGTGGGTG CACTCTCTT ATGAGAATCT AATGCCTGAT GATCTGAGGT GGAACAGTTT  
CATCTGAAG CCATCCCTGT GCCCCTACCT GTGGAAAAAT TGTATTCCAT GAAACAGTT TTTGGGGCCA AAAAGATTGA  
GGACCGCTGC TCTATAAGAA ACTATTACTG AAATAAGGTA TAAAGTCTT ATCTTACTTA TATTTATATC CTCTATGGTG  
TCCACACACA AGGTGCTTTT TACACTTAAG TTGTTAACT AAAATATTNC TTTAACTTT AAT

SEQ ID NO:870: (Length of Sequence = 409 Nucleotides)

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CAGCTTTGCA AATCAAATAG AATTCATTTT GCCTCCNCTN ATCTTACAAC TATTCTCTGG AGTAGGCAGG CTGGTTGAAC  
 TTCAAGAGAA GAGGCGTTCC TGAGAGCCTC CTGGGTGAGC TTGCACACCT GGGGGCCAGA TGINCTTTGC CCTCCTTGCA  
 AAGCCTCTCT AGTCTGGTGC CCAGAGAATA CAGCTTCAGC AGCAGCTCAC TTTGCTTTTN AGTTTAGATG AGAAAAACA  
 GCAAAATAGT CCATCAAGGA CAAATCTTG CCAATGGATT TNCCTTTGCA AGGANGTTCA CCTTTGNNCC TCAAGCATCA  
 TCTTTAAGTT GTGAATGCCT GATGGGAGGT CCAGGTTGGN CTGTGGGAGG AGCTNGGGT GGNITCCAAA ACCACCTGGG  
 GACCACTGG

SEQ ID NO:871: (Length of Sequence = 290 Nucleotides)

TCTTTGCATT GATAGATTAG TTATTTATGC CAGTNGCTC TGCTGGCTT GTTTTGGTTT TNATTGCATT TGTTTGCTAG  
 AGATTGCTTT TAGTTTINCA ATTTCTTTCT CTGTACACCT GCCCCCTCCC CACCCACCA CTGGGTACT ACCTCCTTTT  
 TGGCACTACA TGATGCCITA AGCCAGGNT TGCCTAAGCT TTCATAACAG ATCCAGCAC TGCTCATCCC CAGTGGTGA  
 GGTNCTAAAT GGGATAACCT GATAGTGTTG GAAGGCTGGC TGGGGTTGT

SEQ ID NO:872: (Length of Sequence = 313 Nucleotides)

AAAACAAAAC AAATTTAAAA GCACTCAAAA ATAACCTCAA AAAGAGACTA GTGAGTGTC CTTAAGGAAA GCCCTTCCTG  
 CAGATCCCA CAGAACTCGG CCCAGGCACT TAACCTCCAT CTCAGCTCTG GTACAGCTCA CTGCGTACAG TGTGTACCAA  
 ACTCTTATGC CTGGNCTGCT GATAAATTCT ATTTATCTCT GAACCTCAAT TTATTCAAAT CTAGTTATGA TATATCATAG  
 TGCTTGTAAT TGTGTAAAA TATAGANGTA ACATACAGCA TGTGTCTACA CENITAATAA ACTGGTGCTA ATT

SEQ ID NO:873: (Length of Sequence = 300 Nucleotides)

TAGTAAACAA GTATTACTTC AACTGATACA ATGGCTACAT GACATCAAAG TACTATAAT NATCAAACT ATCGTACAGA  
 AAAATTACAA ATTGCTTGCA AAATACATTA TACTGCTACC ATTAAGAAAA AAGTGCTTTT NGTTTTCTT TCTTTCTTTT  
 TTTTTTTTTT TTTTGCCAGA AAAGTATTCT TNCATATAG AAAATCCTAC ATGTTACCCT GCATGTGGCT AGGNTATATC  
 ATAACGGAGT TTGTACTGAG TCCTTCTGAT TTGCTGGATG AAGGGCTGAA AAATATATTA

SEQ ID NO:874: (Length of Sequence = 364 Nucleotides)

GAGTCATTGA TGCTGAGAGA TTGTAAGAA TATACTGACA GCATCCTTGT AGCTGCATCA CAGTAAATCG GACTTCTGAA  
 TCAAGCAGCC CAGCCTAGCA GCTGATAAGA GTGAATGTAG GTGAGAAGCA TTACCTTATT CCTGTAACAA GAGAAGTGT  
 TTGTGATAAG TGAACTAGG AATGTAGAAG AAGAAATATC CTATGGCTAT TATAAAGAN GAAGGACTTG CCGANTGAC  
 TTGGTGGTGC ACCAGAAAAT AACTTTCAGA AGAATGCTTT CTGTTAAGCT GCTGCATTGT TCCTGGAGGA AATGTTATT  
 CTAATGCATG TTATTTCTTC AAAAGATAGG ATAACAAAGA ATTG

SEQ ID NO:875: (Length of Sequence = 341 Nucleotides)

ATCAGTCCAA TGCAGATTAG TATCACTTTG CTCATAAAG AGAGTATAAA GGTCTTGAA GTTTTIGAAA GGAGCGGCTN  
 AGCTGACTGT TAAGGAAGCT ATCTTTTGT TACAAGAAAT TTATACTTT CCTTCTAAA TTTCACAAAC AGAATATTAT  
 TAGAGACAAC AGAATACATT TACAAAAATG GCATCAGAAA TAATTGANIA CATTGTGTAC AATATCTNCT ATTAATGAAA  
 TAAATGTATA TTTNATATGA TATTTGGTCT TTATGGGAAA ANTAATATAA TINCCAATAT TCTAAGGNTG ANCAAAGNG  
 GTTTACAAAT AGCATGCAAG G

SEQ ID NO:876: (Length of Sequence = 327 Nucleotides)

GTTCANCIT GTGGGTCAAC TTCTAATATT TGATGGTGGC TACACTGTGA CAAGAAAGGT TTTNAGCTT GTTGGGTCA  
 GTGGATGGG ACAAGGGCAC CCAGTGGTGG TGCCCGGNCC AGGGAGGAGA ATACATTGTA GAATATAAGG TTTGGAAGTC  
 AAATTATAGT AGAATGTGTA TCTAAATAGT GACTGCTTGG CCATTTTATT CAAACCTGAC AAGTCTATCT CTAAGAGCCG



CCAGATTTC ATGTGTGCAG TATTATAAGT TATCATGGAA CTATATGGTG GACGCAGACC TTGAGAACAA CCTAAATTAT  
GGGGAGA

SEQ ID NO:877: (Length of Sequence = 404 Nucleotides)

ATTTGGCTCC TGAATGTTGC AGAAACTGG TTTTGTACAC TGGGAAGGA GAGAGTGAAG ACCCTCCAGT TGGTTCTCA  
GTCAGCTCCG TTCTTGGTGT CGCTTCTTG CAATTTTTT CCTCCCCTGG CCTTCCCTGT GAGGGTTAAA AGGGCCATCT  
CCAAGCCAGG TGGAGCCCCA ATCCCATGA CCAAGAGGGC AAGGTATGGG GTCACCTTCT CATGGAAGCC CTCTTCTTAA  
AGGAGCCCAA AGGGGACACC TGCAGAGGGC GGGCTGTGAT CTGTGTGTGA ACTTCAACAA AATCTCAGGT TAGTATTTCT  
CCAATTTAG TTGAACACG ATGTGGTATA CACTACAAA TGCAGATTCT GGTGCCCCC TCCAAGAGTC GGCCTCAGTT  
AAAA

SEQ ID NO:878: (Length of Sequence = 340 Nucleotides)

TGTACCGCTG TGCTGTTGGC ACGAACACCT TCAGGGACTG GAGCTGCTTT TATCCTTGA AGAGTATTCC CAGTTGAAGC  
TGAAAAGTAC AGCACAGTGC AGCTTTGGTT CATATTCAGT CATCTCAGGA GAACTTCAGA AGAGCTTGAG TAGGCCAAAT  
NTTGAAGTTA AGTTTTCCAA TAATGTGACT TCTTAAAAGT TTTATTAAAG GGGAGGGGCA AATATTGGCA ATTAGTTGGC  
AGTGGCCTGT TACGGTTGGG ATTGGTGGG TGGGTTAGG TAATTGTTA GTTTATGNTT NGCAGATAAA CTCATGCCAG  
AGAACTTTAA AGTCTTAGGA

SEQ ID NO:879: (Length of Sequence = 372 Nucleotides)

GAAAAGATAA TGAAGGAATA ATGCAAAGCT GAAGGCTGTG CCAGATGTAA GAAGTGATTA TGAAGGATAA AAGAAAAGGG  
CTTTCGAAGC AGGGAAGAGG CATCAGAGAG AAAACCAATT GTTGAGCCAG TATCTGTCA CAGGGACAAT TGTCTTTNCT  
CTTTAATGCC CAGTAAGGGT CTTCTCAGGT TCATTAAAC ATGCAGAATC ACAAGACCCC CCCAAAGTTA CCATGGTGCC  
AACCGACTCA AAACAATACA GACAAGAAGC TCAGCTCATC AGGAAGGCTG CAGCAGGCAT ATGGGAACCA TCTTGCTCCA  
CAAAGGACAG CTNAGATGGC AAAGATCCCT ACAAGGGTCC ATATCCACGG GG

SEQ ID NO:880: (Length of Sequence = 405 Nucleotides)

GAGCTAGGCA CCAGGCATTG TGTGAGGCC CAGGAGTTTA AGAAATGAAT TAAATATTCT CCCCTGCCCT CTTTGAAGTG  
ACTCTAACGA GGAGACTTAA GANTTATTTT GTAATCTCTA GTTATATTIN CTGAATTTCA GAGCTTAAAT ATTATACTTC  
AACATGAGTC ACACCTTTAT TTATATGTTG GTTTGTCTCA GCTGTGTGT GGGTTGGTGG AAGGAGACCA CACATACATA  
CACACAGAGT ACATACATGC TGTGATGTT ACACACATAC TCACACCCCA CAAAGTGAAG CTCCATGCTC ATTTTGTTTA  
ACAAAGACTA GAGAGGCCIT GCAGACAACA GCTACCTGGA GCAGGAACAA GTGAAGCATG TTTCTGAACC ATTTCTCAAG  
TCACA

SEQ ID NO:881: (Length of Sequence = 336 Nucleotides)

GTCTTINCAG TCAAAAGTCC TTGAAGCTGG GACCTTTTGA AAGTCTGTCA GTTACATGTT GTTGGTAGTG GCTTGTTTTG  
ACCGTTTCAA AAAAGGAAGA AAAAACCCT TAAATCATTT TTCTTTCTC TTTCTACTG CAAAGGCCGA CGAGATTGAA  
ATGATCATGA CGGACCTTGA AAGGGCAAAC CAGAGGGCAG AGGTGGCTCA GAGAGAGGCG GAGACCTTAA GGGAACAGCT  
CTCATGGCC AATCACTCCC TCCAGCTGGC CTCACAGATC CAGAAAGGCA CCAGACGTGG AGCAGGCCAT AGAGGTGCTG  
ACCGCTCCA GCCTAG

SEQ ID NO:882: (Length of Sequence = 369 Nucleotides)

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TGCCATTAGC AACACTGTTT AGATGAGATA ATTAAGAAAA AAAGCCAATT GAATGATTGA GTGAATGANT GATTGAAAAT  
 CTTTCCGAAG TTATAATAAT AATTGTGATT ATTGGGGTCA AAGCAAAACC ATTTTAGTCT AAAAGATTGT ACACATATACC  
 AACTTTTACC CAATTGGGAA TGAAAAATTA CATTTCCAAA CCATGTAGAA ATTCTGANCT CTTTGAAATA TTTCCTTTTG  
 TGGGAAAGAA CCAGAAATTC TTTGTACATAT GTACCCATTT ATCTTATTIN AGTTACCCAA CCAAAAGATA AAATAATATT  
 CTCAAAGAGA TAATTGACTG GAGGAGTTA AAGTGTATT AAATATTAG

SEQ ID NO:883: (Length of Sequence = 369 Nucleotides)

CTGCCATAAG AATATCAGCC TGGGGGCAGT CCAGACGCAG CCCTTTGTCA TCCTTTCTGT TTGCCTAGTC TCAGCAGACT  
 GTGATCACA GGCATTGTCT GGGGATTFT NCCTTTCCCT TCTTGATCT CTCTTGTTGT TCTAGGTGT TTGGTTGTTT  
 ATTGTTATGG TGGCTTTTNA TTTTAACGCC CCTTGAGCCC CATGATGGCT GGTGTCAACC TGTTCCTTTA CACTGTTGGG  
 CCAGGTGCTG CTGTCTTC TTAGGGCATC ATCAATTGCA AATATTTCT TTTGCTCCCT TTATGAAGAT GTTCTTATAC  
 CTTGCTTTT CCATATTTT TNIGGGCCAA GCAATGCCAT CTNCITTTA

SEQ ID NO:884: (Length of Sequence = 327 Nucleotides)

AGTTCATCTT TTCCAGAGG GGTCTGGGTG CCTTTAAAGG GGTGCAGGCC GAAGAAGATG GTGGCTTGGG GAAACTGGAG  
 CTGAACTTGG ATTCAAGACT CTGAGGCACC GGGATGGGA TGGGAATAGG GACTGGCACA GGCAAGGGGA CGATTACAGG  
 ATACGGCACC AAGAGGGTGG CTGGTGGGAC CAGGGGGGAC AAGGGGGAGC TAAAAGGCTG TGGGGGCACA GGGGCATAGC  
 CAGGAGGAGG CTGACAGGT GGGGGCCCGA GAGTGCCCTG GGAGGGAAAC AAATCTTTGA GCACAGCTTC AAATGGCAAA  
 GTGGGCT

SEQ ID NO:885: (Length of Sequence = 380 Nucleotides)

CCAAAAGCTT ATCCACCATG ATCAAGTGGG CTTATCCCT GGGATGCAAG GCTGGTTCAA TATATGCAA TCAATAAATG  
 TAATCCAGCA TATAACAGA ACCAAAGACA AAAACCACAT GATTATCTCA CTAGATGCAG AAAAGGCCTT TGACAAAATT  
 CAACAACCT TCATGCTAAA AACTCTCAAT AAATTAGGTA TTGATGGGAT GTATCTCAA ATAATAAGAN CTATCTATGA  
 CAAACCCACA GCCAATATCA TACTGAATGG GCAAAACTG GAAGCATTC CTTTGAAAAC TGGCACAAGG ACAGGGATGC  
 CCTCTCTCAC CACTCTATT CAACATAGGT GTTGGGAAG TTCTGGGCCA GGGGCAATTT

SEQ ID NO:886: (Length of Sequence = 400 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACAGTA TTAATCCAGA AGTCCTTCT GGGTGGAAAG GAATGAGTGT TTCANACTTA  
 GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTCGTATT GATCAGCTGA ACAGAGAGCT  
 GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCACGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG  
 ACTCTGCAGT AGCAAAAGCA TTAGAACATC ACAGAAGTGA AATACAGGCT GAACAGGACA GAAAGATAGA AGAAGTCAGA  
 GATGCCATGG GAAATGGAA ATGAGGAACC CAGCTTCGCC GACAGNAGG TTGCCACAC TGATTCATT TCGGAGATGT

SEQ ID NO:887: (Length of Sequence = 363 Nucleotides)

TAAATAAAT GCTCTGGATG GGAGAAATGT GGAAGTTACT TTGGAAGTGA ATAATAAGTA AAGGCTGAAA GAGTACTGAT  
 ATACATGCTA AATAAAACCA ATATTTCCCT GAATGANCTA TTCAAAGCAA TTCTGGTGGG TGTAGACAG GACATAGAGA  
 CCTGGAGAAG AAGCTCCCAT TTTTATAAAG AACACAAACA ATCATGTATA GAATGTTGGT AGAAATATGA ATGGTGAAGG  
 TCAATGTAAT GAAGTCTTAG ATGGGAATAA GANAGGTTAT TAGACAAGGG AGAAAAGGTA ATCCTTGTTA TAAAGTGGCA  
 AAGGAAGTGG GCCTGAATTG TATTCATGTA CTAGTGCTTT CCT

SEQ ID NO:888: (Length of Sequence = 318 Nucleotides)

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ATCTTGCATG ATTAATACTA TTGGCCCTGIN CCCTTTATCC TCAGCTGGTT GTACAATTCT TGAATGCTTT CTCTCTCCCC  
 TGAGGATGCT ATAGATAATG TCCTACTGIN ATCTGAAATN AGTCGTTTTG GAGAAGTTTC TCCATCCAGA TACCTATAGA  
 GTCGTCTTT TTTTTTTTTT TTTTTTTTTT ATATGCAAAC NCTCGCTGTA TTATTCAGGC TGATCTGAAT CTCCTGGNCT  
 TTAGTGTGT GACAGCTTTG GCCTCTTAAA ACTGCAGGNT TACAGGCATG AGCCACAGTG CCTGGCCATC AAGTAGCA

SEQ ID NO:889: (Length of Sequence = 349 Nucleotides)

ACAGAAATCT ACGTAGACTT CTNCCAAATG CCACATGAGA GCAGTGGCAG AATACAGAGA GACCGGOGAC CACAGCAAGG  
 AACTGTAACG GCCAACAGTC CTCAGGCATG CAGGCCTGGG CCAACAGCAC AACGCAGAGT CGCTTCTTCT CAGTCCAGCA  
 ATTAAAATGA CCATGGCAGC CAGGGTTTCA TTAGGTTACT TTCAAAAACC ACCTTTGCTG GAAAAAATGT TTGGTAGTTT  
 AATCTGCATA TACGGACAGT CATGCACCAC ATAATGATGT TTAGGTCAAC GATGGACCAC ATATTCAATG GGTAGTCCCC  
 TAAGGTTTAT AACCAGCATA TTTTTTACT

SEQ ID NO:890: (Length of Sequence = 341 Nucleotides)

GINGTAGGGG TTCGTAGGTA GGGCTAGTAG GTAGGGTTAG TAGGTAGGGC TAGTAGGTAG GGCTAGTAGG TAGGGTTCGT  
 AGGTAGGGGT CGTAGGTAGG GTTAGTAGGT AGGGTTCGTA GGTAGGGTTA GTAGGTAGGG TTCGTAGGTA GGGCTAGTAG  
 GTAGGGCTAG TAGGTAGGGC TAGTAGGTAG GGTTAGTAGT TAGNGCTAGT AGGTAGGGCT AGTAGGTAGG GCTAGTAGGT  
 AGGGTTCGTA GGTAGGTTTC GTAGGTAGGG TTAGTAGGCG GTCINTCCTT CTCCACCCT GGNINCTTGT AAAACNTTAT  
 TTTACAAGCA ATAGGAATTT G

SEQ ID NO:891: (Length of Sequence = 344 Nucleotides)

GACCTGGCTG CGCACCAGGA CCGNTGGAG CAGATCGCCG CCATTGCCCC GGAGCTCAAC GAGCTGGATT ACTACGACTC  
 CCACAATGTC AACACCCGGT GCCAGAAGAT CTGTGACCAG TGGGACGCCC TCGGCTCTCT GACACATAGT CGCAGGGAAG  
 CCTGGAGAA AACAGAGAAG CAGCTGGAGG CCATCGACCA GCTGCACCTG GAATACGCCA AGCGCGGGC CCCCTTCAAC  
 AACTGGATGG AGAGCGCCAT NGAGGACCTC CAGGACATGT TCATCGTCCA TACCATCGAG GAGATTGAGG GCCTGATTCT  
 CAGCCCATGA CCAGTTCAAG TCCA

SEQ ID NO:892: (Length of Sequence = 367 Nucleotides)

CTGGGCAACA TGGTGAACCC CATCTCTGCT AAAATACAAA AATTAGCTGG GTGTGGTAGT GCCTGCCTGT AATCCAGCT  
 ACTCGGGAGG CTGAGGCAGG AGAATTGCTT GAACCTAGGA GGTGAGGTGG AGGTTGCAGT GAGCCAAGAT AAAAAGAGTG  
 AGACTCGTC AAAAAAAAAA AAAAAAATA TATATATATA TATATATATA TATATTNGN CTCCAATCCC ATCTAGGTTG  
 CTGCAAATGC CATTTATTCA TTCTCTTTA TGGCTGAGTA GTTTTCCACT GTGTATGTAT ACCACAGTTT ATCTTCTTGT  
 TGATTGATGG GCGTTTGGG TGGTTCCACA TTGTTGCCAG TTGCAA

SEQ ID NO:893: (Length of Sequence = 220 Nucleotides)

GCAAAATATT TATTCCAAGT TAGTTATTTT ATGCAGTAGT TTCCCCCTCG AGACTTGIGA TAACCACATC TTTTAAATCT  
 GTAAATAATG TTATCAAAAT AATCTTAATC TTTGAAATCT CACAAAATTT TATATTTTAC AATCCACCCT GAATATCAAG  
 GCTGCAAGAN TAACACAACA TTTCCTATAT CCAAATATTT TACAGCTGTA CCCAAAAGG

SEQ ID NO:894: (Length of Sequence = 313 Nucleotides)

GGGATTGGGA TTGTTTGGCT CTGAGGCTGT TAAGTCTGGA CTGATGCTGG AAACATAATAT CAATGTTTAA CAGGGTTGAC  
 TGTCATTAAAT GATGTGCCTA GCTGTGGGTA CAGATGCTTT GCACATTACT ACCCTCTATT CTCACAATCT TCCATGGGGG

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ATGTATTAGA ATCCCTTTT ATAAAGGATA AAGGTGAGGG TCAGAGAGAC TAGGAAGCCT GTNCAGGGTG ACACAATACA  
AAGTGCATA AATTGGGTTT GTACTCAGCC ACTCTGCTTA TTAACATCAG CAGTATGGTT AATGGGGTGA CCG

SEQ ID NO:895: (Length of Sequence = 304 Nucleotides)

GGTCTAGATT CAGTTATGAA TGTAGGCATT AGTTAAATTT AACAGATGC AGAGTATTAA TTTCTTAAGA CAACAAGTG  
ATTTCTGTAA GTTTGAGCCC TATGTGGAAA GCATTGTGGA ATCTTAACCT TTTTGTACAC ACTCTGTGG GACGTATCAT  
ATAAATGTCA GCACTAAGTA ATGCTTGT TTGTGGCTGAA TATTTTNCGT AGATGTTTT GAAGTGGACA TGACTTACGT  
GCATTTAAAT ATATATTGCC ATCCCTTAGT TTGTAATTAA GGATTTNGGA ATATGGGTTG TGGG

SEQ ID NO:896: (Length of Sequence = 337 Nucleotides)

GCAAGTATT TCATCATATG CATGTACTGT ACCTTATTTA GCCAGCCCCA TTTTGTGTTGG CTTGTGGAGA ATTACAATAG  
CTGTTTTGAC TGTGTATCA CATGCCAGGC ACTGTACTGT GTATTATCTC ATGTAATTCT CATAGTACT GCATGGTGTA  
GGTATTTTNA TCCCCAGTTT ACAGGTAGAG AACTGAACC CAGAGATGTT AAATAATTIG CCCAAGTTT TTGGCTGATT  
ATACTGATGA AGATACTGAT ACTAGCATTC TGTGTCACT TATTTGCCAG ACAGAATTCT TTATTTTTTA ATACATAATA  
TCCATTTACT CTTGAGG

SEQ ID NO:897: (Length of Sequence = 316 Nucleotides)

NATCACCTNA GGTCAAGAGT TCNAAACCAG CTTGGCCAAC ATGGCAAAC CCCGINTCTA CTAAAAATAC AAAANTNAGC  
CAGGTGTGGT GGTATGTGCC TGTAATTCCA GCTACTCAGG AGGCTGAGGC AGGAGANTCA CTTGAACAGG GAGGTGGAGG  
TCGCAGTGAG CCGAGGTTC AGTGAGCCGA GATTGCACCA CTGCACTCCA GCCTGGGCGA CTNAGCGAGA CCCTGCCTCA  
AATAAGAAA TAAATAANTA AAGTGGGGAA GTTAGTGGTT TCTGGTGTAT TCAGAGTTGT GTACCCATCA CCCTGG

SEQ ID NO:898: (Length of Sequence = 200 Nucleotides)

GAGATCTGGG GCTGGGGTAT GGATGATGGG GGGAAAGGCG GTCCCTCTG CCACTGTGAG GGACCAGCCG GCCAACGCCC  
ACCCGNAAG GTGTCTAAAA ANTTNAGCTT TTCACCCACC TGCCCTTTC TTCAATCCC ACGCTGTTTC CTTTCAAAGT  
TCTGGGAGGA CGAACTCACC GAGGCGAGAA GTNTAACATT

SEQ ID NO:899: (Length of Sequence = 264 Nucleotides)

CTCTGTAAGT TAGCGGTCAT GTTTTCAGCC CCATGCAAAG GCGCAANACN TCAGACAGCG TGGTTCNTIN AACATNAGTG  
TGTTGGTGCCT CCCAGGAGCA GGGATTINAG CNAGGCTGCT GACACATAAA CACACCCCCA CCTCCAGAAG CAGAGGAGAG  
GAGCCAGGG CCAAGGCGAG TAGCTCAGCA AGGACCCAGC ATGCTNCAGG TGGGGCCAGT AAGAGTCACT TCTCCAGCNA  
GGTTCAGAGA GGAGAGAGGC AAGA

SEQ ID NO:900: (Length of Sequence = 265 Nucleotides)

GCAAATGGTA AAAAACAAG TCAGCAGAAG AAATTAGAGG AGAGACCAGT TAATAAATGT AGTGATCAAA TAAAGCTAAA  
AAATACCACT GACAAAAAGA ATAATGAAAA TCGAGAGTCT GAAAAGAAAG GACAGAGAAC AAGTACATTT CAAATAAATG  
GAAAAGATAA TAAACCCNAA ATATATTTGA NAGGTGAATG CTTGAAAGAA ATTTCTGAGA GTAGAGTAGT AAGTGGTAAT  
GTTGAACCAA AGGTTAATAA TATAA

SEQ ID NO:901: (Length of Sequence = 381 Nucleotides)

CTTCTGTGCA TATAAAGAG AACAGTCTGG NCACTTGAAA ACAGACACCT TCTGGTTTTC AATGTGTTGG TCAAAGTGGC  
GATACAGCAA GGTTCAGG GTGAACACAG TGTCGCACAT GGAACACTTA TATATNATTT TNGGTTCTCC TATCTTGATG

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CCAGGATGCT GTGTGTAGGC GTGGGAATNT GTGCTTGGGG CAGACTTAAA CGCCATTGGA CAAATAGGAC ACTTGTAGAA  
 GACTTCACAG TGAGAACCTT GAATNTAAGA CTTACAGACA GCCACATCAG AGTACACAAC CATTGCAAAT GCACCACATC  
 GAAAACCAAC TCTCCTCGTG TAGTNCAGAC AGTTCTTTGT GGGGTGGGGT CTNGGAAGGT G

SEQ ID NO:902: (Length of Sequence = 331 Nucleotides)

GGTTGCCAGT GATCTCCTTT CTTATCACCT ATAGACAGCT TGCTACAGG AAAAAAGAAA GCCAAACACA GACAAGCAGT  
 ATGAGATACA ATGAGCGCCC TTGGGCCATT AAAATATGAT TGINTGCCA AGGTGCGCTG GNCITGCAAAC AGCTCTCCAG  
 AACCTGCAGC CAGCACAGAC CAAAGTCAGG TTTGTNTCCT CTTCTGTTGA TGAACAAAGG TTGATTCCAT ATCGTGGCTA  
 TTGTGAATAG TGGCAGTAAA CATGGCAGTA TTGTATGAAA ATATNACAGA TTAGNCCCTT TAAATATGTG CACTATGGNT  
 GATCTATCAA A

SEQ ID NO:903: (Length of Sequence = 389 Nucleotides)

AGCAATACTA AACATAAATG TAAATGGGC TAAATGCTCC CAATTAAAAG ACACAGAGTG GCAAGCTAGA TAAGGAACCA  
 AGAGCCATTG GTATGCTGTC TTCAAGAGAC TCATCTCACA TGCAATGACA CACATAGACT CAAAATAATG AGATGGAGGA  
 ACATTTACCA AGCAAATAGA NAACAACAAA AAATATTTCT AATAGATTTC TGCTTTTAAAT AATGAAATAT GTCAAACCTC  
 TATAAAAACT ATATGTAGGA AATATAAANG TTTATATATA ATTCATGTAA TGGNTAATAG TAACTGAATA GCTAGTATTG  
 AATAACCAAG CTTCTTTTGG TTGTTTIGNA CATTGGNGNA ATTGAACATG CTTAAAGGTA TTGGGAAGG

SEQ ID NO:904: (Length of Sequence = 285 Nucleotides)

AAATCAAGGA CCGGTTAGAT AGATGATGGG CTAGGCAGGT GGGGGAAGAC AGAGCTCACT GCGCINTGGG GTCTCTGTGG  
 GGCCAGCCCC TNATGCCCAT GTGGCCACTN ATGCCAGCT TCCCCAACA CCCCANCACA GGCCAGGTC AATATTACAA  
 AAGTGAACAA ATGCAACCTG TTTCTGCTTT NACAAATGAC ATGTCTCCAT CCGCGGCCAG CAGGGGTAGG GGAGNCGGT  
 TGAAAGTGNC ACTCCGGTTA AAAAGGCAAC AACTTTTATA AAATG

SEQ ID NO:905: (Length of Sequence = 374 Nucleotides)

GAAGCAAAAA GTTGAACCTT TTAAAGTGCT GAACACAAAT CCAAATTGGA ATGGTTCAG CAGCCGTGAA ATCGCTCTTC  
 ATAAAGTGGG CTTAAATCTC TAGTTTAAGT TCTTTTGATG GAATGAATTA ATTAATGTGT CAGGTGGCTT ATTTGTGGAT  
 GCCATGATTG ATGATGTTCA TTTTAAGCTC TTACCTATAG TACAAGTACA TGATGCTACT GAATATTTTT TCCACTTGGA  
 AACTGTGAGC TGGGTGTGTG CATTAATAACA CACATACANA CANAATCANN AAACACTGCG GACTTTTCAC TCAAGCTGGG  
 TCTTTTCTTC CCCAGTGGTA AGGGCAAATC CTGGCCTANC TAACCAACAC CCAC

SEQ ID NO:906: (Length of Sequence = 375 Nucleotides)

CTGACTGAAA GGCTCTTTCC AGCTCCAACA CATGAAGGTT CCATAATTTT CCCCAAATGT CTGCCGCTCT GAAAACTTCA  
 ACTATCTTAA TATTTGTGAC ATTTATGCCT GGTATGGCA ATCTGATGGT AAAAGGAGCC ATATGTAAAT AATAACTGAA  
 ACTTTGTCAA AATAATGTTA AGGAAACATA ATTAGCAAAG CAATATATAA TTNCAAGTCC ACTGATTTAG AGAATCAGAA  
 GTAACANITA GAATCAGAAA TAACAACTAT CTGGCAGGGA TGGAAAAATG AGAGCAGATA TAAAAGGTGT ACCCCAACCC  
 CTGACCCAC TGCCCATTTG GGTGTGCACT ATGINTTTCC AATATTAATA TCTTT

SEQ ID NO:907: (Length of Sequence = 390 Nucleotides)

GTGCTGACTT CAGCAGCCCT CTGAAAGGCC CCTTCCATAA GCTGGGAAAG TATGATCATG GTTTCATCAT CTTGTGTGGT  
 TATTACTTCA AGGTTGACCA ATCTGAAAGC TCTGTGTGAA GAAGGGGACT GAGTGGCTGT GAATGATGAG ACCGTTGTTT  
 AAAAGCCAGG CTTAGCCTGA GGTCCGGAAG AAGCAACCTC AATGCTGTGC TTTACCATAG CACCACCTGC AGGTATCCAG

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GAATAGAGAA CCCAGCTGAG CGACTCATGC TTNACCAAAA ATACCCAGAG CAGTGTGTCT CTACCTTTTT AAGCCCATGC  
TCACTAGTGG GGAAAACAAT TTTACCCCC TGTATTAAAA TATGGGGATT TCAAGGCAAA CAAAAGCATT

SEQ ID NO:908: (Length of Sequence = 207 Nucleotides)

CTGCATACA GGTGGTAAAT TATTACATTA TTTCTNCTC CTGTCTACCT GCAGTTGGTT TTATGAGGGG CGTTAGTACA  
CTTCCCAAAG GGCTTGCCCG CAGGTINAGA GGTGCACATT GAACTCCCTC ACCAGGCAGA TGGGAAGTGT GGCCATGAGA  
GAGAGCTTCA GGGGNCCTNG GNTTATNACA TCGCTGGGCC AGGANAT

SEQ ID NO:909: (Length of Sequence = 339 Nucleotides)

GCAAGAGAAC CTGATATAAT ATCTATAAAT TTTGATTCCC TGGGGTATAA CAAGTAAATA ATTTTTAAAT GGTGCTTAGC  
AAGATTGGTT CATGGNAAAT GAAGCAATTA TGGCTTGANT TTATATGTAC AATATTTATT GTCTTAATTT TAATTTAAAA  
CGAATGACAT GTCTCTTTTT TTAATAAAAG TCTTCTTTTA AAGATCTTGT AGTTGATGTG ATGAGCTATG CACTGCTAAA  
TATTTATCCA CACATAAATA TTTGANAAGG AATATGGNAT AGTCATGGGA TGTAGTTTCA TCTCAGTGCT CCATGGAGGG  
AGTGTTTTCA CCTCTCTCT

SEQ ID NO:910: (Length of Sequence = 372 Nucleotides)

CTCAACTGCC ACTCACCTAT CTACCATCCA CTACCCANTN ACCACCCACC ATGACCCACC ATTTGCCATC TACCCATCCA  
TCCATTCTAT AAATAATTAG TAAGCACTTA ATGCATGCTA GGTATTATTT TAGGCACCAG TAAGACAATC ATGGGNAAAA  
AAGACAGACA ACCCCCGACC CTCCCATCCT CAGGGAGCTC TATTCCAGTG AGAACAATCA ATGTGCTAGA TTGTGAAGGT  
CATCAGTGCT TGCTGCCCGT GTAAGACTGA GGTTCACAGG CCCGAGGACC AGNCTGGGCC AGGGCTTCCC AGGGGTCTNC  
TATGGGGGA CTCTCAGGAG TCCAGCTGCT GCCCCTTAGC TNAGCACTG GG

SEQ ID NO:911: (Length of Sequence = 377 Nucleotides)

GAACTTCAAA AAAAAAAAAA AAGAGGAGTC ATAATAAATA TTINACTGTC TAGTCAACC AATTTATGAA GCCTGATTAT  
CTAGCTNAGC CTCGGAGAT TGCTACCGGA AATCTCCCA GATGTTCCCC CTCTTAACC AACTNTCCAC TGNTGSCAG  
GAAGGCAGCC GGGCATCTGC ATTCCGGAAG CCCAGCTGCT TGGGAAGAGA GAGGGAGCGG CCTGCACGTN ACTCAACAGC  
CCTGCCTGCT AACCAATTAA CCAGTTCTCA GTTGGGTCA CGGACCCATG AGCGACCCAG CTCTCTTCCC CTCAGGTTGA  
TATTGTGCTC CAAGCTNGGG GATGCCCCGG GGGACTATGT GGAGGGAGAG TTCCTTA

SEQ ID NO:912: (Length of Sequence = 370 Nucleotides)

ACAATCTACT TGCTACAGAA TCAGGATGTA TTNCCTATT TATAATAAAC TACAGAAGGT AGATTTCAAA GGTAATGGCT  
GTTATGGAAA CCTACTTGAG GTTGTCTGCT AAAACCAACT CAGTGTGCAA AGCGAAATAC ATTTNCTACT TCAATAGCTC  
CTCATACTGC ATCTGTCTGT AGAGTTTATT TCAGTAAAC TGTTTACTAT TTCATGATGA GTAGCTAGAA TTAAAGCAIT  
AAGTAGCTTG AGAAAATAAT CTATATAAAT CTTTATATCC TACATATGGC TATAAAAATA AATTTATAAT TTTAAAAATT  
GTTTTAAATA AACATTATTT TTTTACCCTA CCAAAGTAAA GGGTATACAG

SEQ ID NO:913: (Length of Sequence = 313 Nucleotides)

GTATCTGGTT GCCACATCCA AGAAGAACGC GTGCNINTCG CTGGTCTTIN CTTTCTCTA TAAGGTGGTG CAGGINTTTT  
CCGAGTACTT CAAGGAGCTG GAGGAGGAGA GCATCCGGGA CAACTTTNTT ATCATCTACG AGCTGCTGGA CGAGCTCATG  
GACTTCGGCT ACCCCCAGAC CACCGACAGC AAGATCTGCT AGGAGTACAT CACTCAGGAA GGCCACAAGC TGGAAACAGG  
GGCCCCGGG CCACCAGCCA CCGTNACCAA CGCGGTGTCC TGGNGGTCG AAGGCATCAA GTATCGGAAG AAT

SEQ ID NO:914: (Length of Sequence = 389 Nucleotides)

TTACAGGGCG CTGCCACCAT GCGCGGCTAA TTTTNAGTAG AGATGAGGTT TCACCATGTT GGCCAGGCTG GTCTCAAACCT  
CCTGACCTCT GGTGATCTGC CCACCTCAGC CTCCCAAAGT GTGGGGATTA CAGGCGTGAG CGACCGTGCC TGGCCTTCTC  
CACTGTTTTC ATAGTGAAGA AAGGACACC AAATTTTGAT CTGGTTCAGC TATTCACTAT TCTATCCTGT GTGGTCTTAA  
GCAAGTTACA TAACTTGCCT ATATCTCAGT TTACTTAGCT ATAATATAAA TTAAATTGGT CAAATGTTCT CTAAAGTCTT  
ACTAGTTACC AGTGTTCAT GGGCCCAACA GCATCTACAT TACCTGAGGA GGCTGGTAGG AAATGCAGG

SEQ ID NO:915: (Length of Sequence = 328 Nucleotides)

CNCCAGCAGA TTTTNATTAG ATGGAAGATA ACAAGCATT CCNCATAGGT AAGTGGTAAG AAATGGCAAG TACAGCCAAG  
CCACAGAGGA GTGAGGACAT TACTGGCTAT GGGAAATGGT ACTTATGAAA TCTAAGGGTT GGGTCTCCTG ATGAACCTTA  
ACTACCCAGT AAGCTCTTCT CTTTGGCACT CAATATGACC NCTGCTGGCA TGAAAGGGNC TACAGTAGCT ACTTTCACT  
TGGCCAACAG TTCTTCCAGT TCTGGTCGAG CTTTGAATCG TCCCTTTGAA GTCTTCTTTC AGNTGGTGCT CCTTCAACTT  
GACAAGTC

SEQ ID NO:916: (Length of Sequence = 365 Nucleotides)

CAACTTCAAG GTGCTGCAAG AGCTTCAAG AAGATGGGTG TTGACAAAAT CATTCCTGTA GAGAAATTAG TGAAAGGAAA  
ATTCCAAGAT AATTTTNAGT TTATTCAGTG GTTAAAGAAA TTTTGTGAGC CAACTATGA TGGAAAGGAT TACAACCTC  
TNTGGCGCG GCAGGGCCAG GACGTAGCG CACCTCCTAA CCCAGTTCCA CAGAGGACGT CCCCCACAGG CCCAAAAAC  
ATGCAGACCT CTGGCCGGCT GAGCAATGTG GCCCCCCCCT GCATTCCTCG GAAGANTCCT CCATCAGCCC GAAATGGCGG  
CCATGAGACT TGATGCCCAA ATTCTTTGAA CTCAAACCAA CAGCT

SEQ ID NO:917: (Length of Sequence = 400 Nucleotides)

GCATTATTTA TTGAAACTA TGTATTTTTT TGTA AAAACC TGATCACATA GAGAATATCA GTGGCTATAC CCTCTCTGGG  
CATCAGTTTC CTCATCTGTA AAGTGGGGAT AATCACAGCC CCCACCACAG TGGGCTTCAG GGAGGAATAA ATGCATTAAC  
ACATGGCAAG TCAATTAGGA CGGTGCTGA CAGGCTGTCA GGGCCCAAGG TTGTGACTTT TGCTTTTCTT ATTGCTACTC  
TGCAACCAAC TTTAGATAGT GGTAGANTAA TCAGGAGGCC CTCTTGAATG GGATATTTTG CACAGAAGAG GTCCAGACC  
GAGTGTGTGT GACATGGGAG CAGAAGACCC GGGGTTTNAG CCAGGCTCTG CCACTCATAC GGTGTACAAT TTTCAAAGGG

SEQ ID NO:918: (Length of Sequence = 348 Nucleotides)

CTATTGCACA TGGTAACTCT GTCATACATC TATAAAGCCT AGTAGCTGTA TTGGGTGAGA TGAAAAAAC TGCTTATATT  
CCACAGCAAC ATAATTACAA ATAAGTTTTA ACCTATTAAA GTACAGAGTC TCTCTCATCA CTTTCAAAGC AGGACCTAC  
TTACCAATAA TTCATAGCAT ACCTCCCTT ATTTTAAAC TCATATGATA GCTGATTTCC TAACTGTAGC AATCAGGATT  
CTTAGAAAGA TTCGAACTG AATTAGCTA ACTAAGGAAG CGGATTTTCT TAAAAATATT GGGTTAGTTT ACAGGAATCA  
GTAGTGGAGG AACCAGGGTT GCATAAAA

SEQ ID NO:919: (Length of Sequence = 345 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACAGTA TTACTCCAGA AGTCCTTCCT GGGTGGAAAG GAATGAGTGT TTCANACTTA  
GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTCGTATT GATCAGCTGA ACAGAGAGCT  
GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCACGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG  
ACTCTGCACT AGCAAAAGCA TTAGAACATC ACAGAAGTGA AATNCAGGCT TGAACAGGAC AGAAAAGATA GAAGGAAGTC  
AGAGGATNCC ATGGGAAAAT GAAAT

SEQ ID NO:920: (Length of Sequence = 299 Nucleotides)

CCCAGGTACT CAGGGAAGGG GCAGGAGAAC CACTTGAGCC AAGGAGTTCA AGGCTGCAGT GAGCTGTGAT CACACCACTG  
CATTCAGCC AGGACAACAG AGTGACATCC TGTCTCAAAA ATAAATAANT TTTTAAATGA TGAAACTAAC TAAGGTACTG  
AGGAGGTAAG ATATTTCCCC ACGGTAAGTC ATTCAGAAAC TAAATGTGAA AAACCAAAG AAGCCTCTGG GGTTAGTATT  
CCCAGTCTCC TTGTCTGCCC AGGACCCAC ATTTGTGTAA GTTGCTAATT GCACAAGGG

SEQ ID NO:921: (Length of Sequence = 234 Nucleotides)

ATGAAGCAGA GGCAACCAAC AGAAATGAC ATCAGAAACT CTGCTGNTC CCCACCAGCA TGCTACCGAT GANTCCTGCT  
CTCTTCAGA TGAAATTTTA TTTTTTNC AATAAGGCCA GCOCTACCCT GGAATCTGGA ACCANTCTG GCCCAGGGTA  
GAAAGGCTAC CAAGCACCTA TGGTAGAAGC CTTGGTGTCC AGGNATGCCT TGGNCCTTAT TATTGACCTT CTCT

SEQ ID NO:922: (Length of Sequence = 328 Nucleotides)

TAGCAGGGTT ACTGGCCTTG GCTGCGGCCA AGGGAAACT CTGCAGGCC TATTACTTGG CGGCCTTTAA CTCTTATAGA  
ATTGGGAGAG AACACTGACA AAAGCGAGGA CATGATTTIN CGGTACAAA TNATTTTCCT TGCCTGCTTT CTCTCACCC  
TTTNAATTT TCCTTTCTN CTTTCTCTGT CTATCTTACC TTCCCTCCGT GATCCCTGCC AGCCCTCCT TTCTTATTAT  
AGCTGATCAT GGCAGTATTG TTTTTTNC GGTAAATC AGAGTGGGAT TTAGAGAAAG CTTAGCAGGC CTAGCATGAG  
GGCCTTAG

SEQ ID NO:923: (Length of Sequence = 371 Nucleotides)

CAGGAAACCT ACTGTGAAAA TGCAGAAAA CAACAGCAA AATTGATTGT TGACTCAATA TGATATATAG TTCAAATGTA  
AACAAATGCT TGTNAGCATT CCACATCACT GAAGGAAAA AAGTAAGTTA TTATTTCCAA TGTGAGGAGT TAGGTGCTA  
TAAGCTTATG ANCACACACT TTCAGTGAAT TTATGTAGAA TCGGAAGCAC TTCATTCTCC CCTCACCACA CATCACCCCC  
TTGCTCTCC TCGACACGTG CAAAATGATA GGGCATGTA GGGGTGTAG TGAAATGAG AAGGCATGCC CCATCTCAAG  
AAACAGGGTG GACCAGCCAC AGCTTTCAGC TCCANTTGT GATACAGGAA T

SEQ ID NO:924: (Length of Sequence = 371 Nucleotides)

ATGATCTGCT TTTTTTGTAT ACCTTTACTT TTNAGT AGGNGCGGGG TTTCTGGAGC CGACTGAGGG ACTGGAGAAG  
GCTACGGGGG TCCTCGCCCT GCCAGGGCAA TCCTT CTCTTATCA TTGTTTATG CAAATCGCGG TAAAGTTTTT  
CCGAAGGGGG TGCTGGCTCC TCTTGGCAGC TCTTCTTGT GACTTTGGGC ACCAGGGCTG CTCATACCTG CAGCCTTTTC  
GGCCTCTNG GCCCGCAGGC GTCCGGCCTC CCGAAGCACT GCCATGGCCC GGAATAGCAG CCCNGAGCA AGG

SEQ ID NO:925: (Length of Sequence = 317 Nucleotides)

AATGCTTTAT GATCAACTTG CCATAGGACT GATGGATTAA CCAGTGTTCG GCCTTATTTG AAGTCTATGC CCTGCACAGC  
TCTTGTATGT ATTINAGATG CTAGAAGTTT TTINAGCATG TNATGTGTA TTCTTGTGTTG AATTCTAGEN ACCTTGTCCA  
ACTTGGTTCT TTTTCAAGGT TGTMTGGGT ATTCTGGGTC CCTTGTCTTT CCATATGNAT TTNAGGATCA GCTTGTCAAT  
ATCTGCAAAA AAAAAATCAG CTATATTTTG ATAGAGNTT GTATTGCATC TTAGGANTG GTTGTGTGAG TATTGCC

SEQ ID NO:926: (Length of Sequence = 247 Nucleotides)

GTTATTCATA CCACAGCATT TAAAAAGCAA TCCGCAAGTN ATAAAAAAA AAAAAAAA ATGATGTGAC ATATCCATTG  
CCTGANITGC CTCTTTGTGA AGCCAGINTT GGGATTATAG CAGAGGAGTA GCAGAAATAA NTATATTGAG ACACAAACAT  
ATAGATATAA TAATATCCAA CCNCTTTATA TGATTTAGGG TCTCGTTAAA ATGGTTACCA TTTGCTTCTC CTAAANITA  
TATAAT



SEQ ID NO:927: (Length of Sequence = 286 Nucleotides)

GGCTGTCATG AGAATCACTT GAACCGGGA GCGGAGGTT GCAGTGAGCT GAGATCATGG CACTGCACCC TAGCCTAGGT  
GACACAGCAC AAAAAAANC AATGTTCCAC AAGTCAAAAA TTGINTTCAG GGAGTAGAAA AGTAGTAGGC TAGGTATCAA  
AGGGTATGAA TGACTAAGTT CCTTCTATAA TATATTGACT ATAGGTTAGG AGATACACTT TCAGTTCCIG TTTTNGTAG  
ATCTCCCAAT GATCTGTCTT TTAAGAGTAC ACACGATGAG TGGAAA

SEQ ID NO:928: (Length of Sequence = 349 Nucleotides)

CTTGTTTAAAC CAGTATTTAT TGCACATGGT TTTGTATCT ATTGCATGTG GTAAATTACC CCATACTTTG CTTCCTAAAG  
CATTAGACAT TTCTGTAGGT TAAGAATTCA GAAGCAGCTT AGCTGAGCAG TTCTTGCTCA AGGTCTGTCA TGAGGTTGCA  
GTCAAGGAGC TGGCCAGGGC TGCAATCATC TGAAGGCTG ATTGGGGCTG GAAGACTCCC TTTCCAGATG GCTCCCTCAC  
AGGCTTGGCA TGTCAAAGCT GGATTGTTGG CAGGGGACCT CCATTCTTCC CCACATGGGC ATCTCCATAG GCTGTTTGAC  
ATGGCAGATN GCTTCTCCA GCAACTGGG

SEQ ID NO:929: (Length of Sequence = 395 Nucleotides)

AGAGGAGGCA GCAGCCACCC CCAAGAAGAC TGTACCTAAA AAGCAAGTTG TGGCCAAGGC CCCAGTGAAA GCAGCTACCA  
CCCCTACCGG GAAGGTTCT AGCAGTGAGG ATTCTCTCCAG TGACGAGGAA GAGGAGCAAA AAAAACCCT GAAAAATAAA  
CCAGGTCCCT ACAGTTCAGT CCCCCCGCCT TCTGCTCCCC CACCAAGAA GTCTCTGGGA ACCCAGCCTC CCAAGAAGGC  
TGTTGGAGAAG CAGCAGCTT TGGAAAGCAG TTAAGACAGC AGTGATGAGT CTGATTCAAG TTCTGAAGAA GAGGAAGGAA  
ACCCCCAAT AAGGSCAGTA GTCTCTAAG CAACCACTAA ACCACCTTCA GCAAAGAAAG CAGCAGAGAG CTCTT

SEQ ID NO:930: (Length of Sequence = 214 Nucleotides)

ATCCAACAAT GACAATCTCT CTTCGGACAA TATTGGCACT CCATTCAAAC CTGTGTTTCAG GTCAGTCCGC ACTTCATCAT  
CTCCCAATTT GTCCAAACA TACTGTAGCT CAAGTACAGT TTTTAAAGT TTCTGTNCAG CTCTTCTCT CATAAGCTGC  
TCCCGACGTG CTGTCTCTT NATGTGTTT TGAATATCTT GACTTAGTGC CATG

SEQ ID NO:931: (Length of Sequence = 245 Nucleotides)

GAAAGINTTC ACAACATGA TGCTTATCTA ATAAATATC ACTGAGCAAT AAGGAGAAAT ATTTTAAATA GATTGGAAGT  
TGTAACAAA TAATTAGAG TCCAAAGAGG ANAAAGANAA TTAAGTCTGT TTTTATATCC TAGAAGTCTAG AAACCTTACT  
GGATTGGTCA ACAAGACAA ACTTTTATTT GTATAAACA GTAGANTTCA TGAAGGGAT AATNCTTTTG GAACAGGCTT  
CTCGG

SEQ ID NO:932: (Length of Sequence = 303 Nucleotides)

CATATGCGGG GCCAATATA AAGCAAAGCT GGAAGAAGGG ATGATCCATG TATTNTTGGG GATGGGATAT GGACAGGGAA  
ATAGTGTTC AACTCCATGC TGAGTGTGT TTTGAATGT AATGTGAAGT TGCCACCATA CCAGGGCTAT GACTGTNTAC  
GATGTCTAC CCTGTAGGC TAGTAGCTTT GCAGTGGGAA AAGATGACAG GGCCACTTGT CCAGGGCAAT CAGGTAATAA  
AGTCCCTGAG CTCCAGTTG CTAGATCTAA GGAAGTATTT TTCCCTTCAT GTCAAAGATG GGG

SEQ ID NO:933: (Length of Sequence = 186 Nucleotides)

CTCTTTTGGG CTGTTTANA TCCTCGGCGA ATTGAAAGCA GTGATCTCTC AGGTGCTAAC CGGNATAGTA TTAGAAGACT  
CCAATATCTT GCAGCTGTG GGACTTACTG TATTTATCTT TGTTTGTGTT CATTGTCTTT TGGGTTCTTG GTCATGAGGT  
TTTGCTAAG CCAATGTCTT CAAGGG

SEQ ID NO:934: (Length of Sequence = 336 Nucleotides)

GGGAAAACGT ATCAGCACAT GAAATACCTT GTAACATTTT CATTTATATA ATTTGCTACG TGTTCTTTGC AACATAGTGA  
 AAAATAATCA TGTCTGATGT TTAGTAGGCA CATAATAAAT AGTAATGGAA TGAATGGTTG TATATTTAGA GAGCCATGCT  
 GAAAGGTTAA ATAGCAAAAT ATGACTACTT GGAGAATAAT GTTAAATTGT CAAGGAGAGT AGTGTATAT GAATACTCAG  
 ATGGATGGAT ATATAGANAA TGAGAAAAGC GACAGAAGGA ACTTAAAGAG NTTTTAAAAA TAGCTTTGTC TAAAGATTAA  
 AAATTAAAGG TTCTAA

SEQ ID NO:935: (Length of Sequence = 383 Nucleotides)

AGGTAAGAAA ACTGCTGAGT GGGCTCCTTG TACCAGCACC AACCAGCAGC CCTTGACAGC ATAGATGGGA TGAGTGTAA  
 GGCTATCCTT AGCATAAGGG AAAGACGGTT ATAAGCTGAG AAGATTGAAA GAAGAATGGA GCCACAAAGA GAATAGCATA  
 AATAACAAGA AGGAAACATG AAGAACAAGC ACTTAAGNTA TTAACCTTCA GTCTTTCTCC ATTTCTTGAT GTCTAATGAG  
 GCAAAATAAC TGGGCAAGGA CCACCAAGAT GAAGAAGTTA AATAAAATGT CACAATGAAA TTNAGGTGCA ATAATACAAC  
 TGTTGACTGA CTTTCCAAAA CCACGGTGAT CGGTAGAGTA TCATCAATGT TACCGAGGAT TTT

SEQ ID NO:936: (Length of Sequence = 204 Nucleotides)

GAAGCTGTGC CACCCTTCTN AACTTTNATG AGCTGCCCTNA GCCGCCAGCC ACCCTCTGTN ACCCAGAGGA AGTGGGAAGGG  
 GAGCCCCCTGG ATGCCCCCCA NACCCCACT CTGCCCTCAG CCCTTGAGGA GCTGGAGCAA GAGCAGGAGC CGGAGCCCCA  
 CCTGCTAACC AATNGCGAGA CCACCCAGAA GGAGGGGACC CAGG

SEQ ID NO:937: (Length of Sequence = 386 Nucleotides)

CTAACTAAAT AAGGGTTGCC AGATAAAGTA CAGAAGGCCC AGTTAACTT GAAATGCATA TGANCAAGAA ATATATTTNA  
 GTATGANTAT GTCTCATGCA ATATTTGGGA CATAATTATG CTAAAGAAAG TATTCACAGT TTTNCCAACA TTCAAATTGG  
 AATGAGTGTC CIGTATTTTN ATTTGCTAAA ATGGGCAACC CTAAGCTGGT ATCTCTACAG TTACATACAC TTACCAACCC  
 CACCCATTCA TACTGGTCCA AGTTACACCC CAAAAGAGGG CAGAAACAGA ATCTGAACAA GCTCAAGTTT NGAGGGCAAA  
 AATGTTTCAT TCTGCCCTCT GGATTNCTGT ATGAAGACTT TGTGTGTGAA AGATATGAAT AGAACC

SEQ ID NO:938: (Length of Sequence = 349 Nucleotides)

GACACTTTCA GAATTAAGAA GCCTTGCCCT CTTTGGTGT CTTCACAATT GINTTAAGTC TATTATAGTA TTCATTTTAG  
 TTTGAAAGCA ATAAATACAA TATTAGTACA AGCACACTGT CAAGAAATCC CTAGAATATG GCTCCTCTGA AGGTTGACAT  
 GGGTCTGCCT CGCATGTATC TTTTCATCTC CAGCATCCAG ATCAGAGTCA ACAACAACAA CTCTACAAAT ATCAGGCTTC  
 TTGGTGGAAA GAAATCTGGA CATTITTINCT ATGAAAAAA AGTTAGGTTA CATGGCATT AATATTTTGC TAGACTTAAC  
 CTACAGAAAA TGTTTCAAGC TTATAAAAA

SEQ ID NO:939: (Length of Sequence = 374 Nucleotides)

GAAATAAGC CTCACAAGAA ATAAGGTGCT TATGGTGTAA AGTTACAATG GAAATAATC AATGGCATTT GTATGCATGC  
 TGCATGTGTG ATGTAGATCA GTTCATAGGA GATGGGGCAA CAAATAAATA TCACCATGGG GATGTGATCA TCAAAACCCA  
 GGCTGTGGAA AACTGTCACT CAAGTTTCTT CAACATATTG CAAGAAAAAT ATGATGGCTT GAAAATCTAT AGATGAAGCA  
 ATTTAACAAA CCTACCAATC TCATTTAATC TTGATTACTT TTAATAAAAG ATTAATAAGA TGACAGAGAA AGGGTTTAAA  
 AATTTGTAAG ACACGGCTGG ACGCGTGGC TCACACCTGT AATCCAGCA CTTT

SEQ ID NO:940: (Length of Sequence = 385 Nucleotides)

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GTAATCCCAG CTAAGTGGGA GGCTGAGGCA TGAGAATTTC TTGAACCCGG GAGGCGGAGG TTGCAGTGAG CAGAGATCAC  
GCCACTGCAC TCCAGCCTGG GCAACAGAGC GAGACCCGTG NTCAAAAACA ACAAATAAA TTTCCTTTTA ACATCTGTC  
CAAAAATGAG ATAAGCGTTA TCAGGGCAAG TCCATCCTCA TCACTCTTTC CCTCCCCACT GCCCTCTCCA CGATGCCAG  
CTGATCAAAA GTCATTTTTA CTCATAAGAC CAAAGTATCA TGGGATACTG TGCAGTINGA GAGCAGGTG ANCATCAGAA  
ATAATTGCTG ACAATAAAGT AAAAGATGGG AGAAAAGCAA GGCCNATGT ATATAATACA GCTTC

SEQ ID NO:941: (Length of Sequence = 406 Nucleotides)

GGTAACAGGT TTTTACCAAC AATTGCTTGT AGCTAATGTA GAACATACTT GAGAAAATGG CTCTGTGAA AGACCAGTTA  
GTACCAAAT AATCTGGCCC AGAAAAATAG CCACCATCTT TGACTACATT AATAGAAATA GAATAACCCC CAAAGGGAGA  
TGAGAAGCAT TCTAAAGTGC ACTGATCATG AGTTTCTATG TGATGATTIG TGTCCATTG GAGCTCCAGT GCTTTAAAGC  
TGAAATGAAT CCTGGCCTTT CACCACCCTC CTGCCCCATA GTATGGTATA TCCTCTTATT CCTTCCCTCT TAGCTTACTG  
AGAGTGTAAAT TTCCAACCAG TTAAGGCCAA AGAGGACTAT TTTCTAGGAA AGGAGAGAGA GATGAATTAG CAGTTAATGG  
AGGAGT

SEQ ID NO:942: (Length of Sequence = 296 Nucleotides)

GATGGCTCAT GCTAGTTCAG CAAATATTGG GCCCTTCCIG GAGAAGAGAG GCTGTATCTC CATGCCAGAG CAGAAGTCAG  
CATCCGGTAT TGTAGCTGTC CCTTTTCAGCG AATGGCTCCT TGGAAGCAA CCTGCCANTG GTTATCAAGC TCCTTACATA  
CCCAGCACCG ACCCCCAGGA CTGGCTTACC CAAAAGCAGA CCTTGGNGAA CAGTCAGACT TCTTCCAGAG CCTGCAATTT  
CTTCAATAAT GTCGGGGGAA ACCTAAAGGG CTTAGAAAAC TTGGCTCCTC AAGAGT

SEQ ID NO:943: (Length of Sequence = 223 Nucleotides)

GTGCCATTAC AACTTTNCIG TAACCTGAA ATTGTGTCAA AGTGAAAAT TTTTAAATGA GATTATAAGA GCATAATCAA  
ATTGGAATTT CCTTAGGATA CCAGAGAATC ATTTCCTTCT CAGGTAAAGG ANTTTTCTT TTTAGTCC AGAGCTATAC  
ATGATTAGA AANIGTTCAG NCCAGGAAGA TGACATCTCT GCTAACCTAA TCGATTATCA TGG

SEQ ID NO:944: (Length of Sequence = 327 Nucleotides)

CCAGGCACTC AGGCTGGCTG TCCCTTNTT CCTCTGCCC ACCCATCCA CTCTGAGCAT CAATGCAGCC GGCCAGTTGC  
AGGCAACCAG GCAGCACCTT GGCTGCCAG GCAGGCTAAG AGGCCCCAC CCACTCCCC CTCTTTTGCC AGTGGAAAAG  
CTTGCCGTAG GCATAGCTTT CCCAGCCTTC CTGCTTCAN AGGCAGGAGC ATGGCACTCT GGGAGTTGTA GTGCTCATAA  
CACTCAGGCG ATCCCTTGTG CAAATAACTG GAGGAGAGGA CTATGGTATT GGGGAAGAGA AATTNAGGAA TAAGCAAGGA  
GTTGGCT

SEQ ID NO:945: (Length of Sequence = 222 Nucleotides)

CTTAAACAAT AAATACACCT GAGTTAGTTT TCCAACCTT TCCTCTGAT TAAATGCCCT TAAACTTAA ATCTCTTGT  
ATCTTCAGTT GTGATCTAGT CCAAGTGG AATTACGTTT AGCTTTAAAA CCATGAATTT AAAGCTCAAG CCTGTAGCTG  
GCTGCCTAGG CANTTTATGA TTAGTTTCAC AGAATAGCAC CCACTGGCTA CACAGNCCC AG

SEQ ID NO:946: (Length of Sequence = 286 Nucleotides)

GCTCTCTCTA CCCCCTCATC TAGGTATGTA TATAGCTCAT TTATTTAGGG GTGATGTTAA AAAATTGAAT GCCCTTAAAG  
GCAAGGGAAC CAACCAATCA ATGTGGATGC CACAACCTTT TCCCCGTG ACTGTGTA TGGTATGGA AGTATTTTTT  
TTTTCTCCA GCTTTTATTT CAGGTTCAAG GGATACATAT GCAGGTTTGT NACATGGGTA AATTGCATAT TGTAGGGGTT  
TAGTATACAG GTTATTTTAT CACCAGGNA ATAAGCGTAG TACCTG

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SEQ ID NO:947: (Length of Sequence = 335 Nucleotides)

GGAGGTGCAT TTNCTCCCCC TTGAAAGAT TTATGTAGAT TCCTAAAAGA AAATTCAGAA TATGGAGTAG CTCCTGANTG  
 GGGAGATGTT GTTAAGCAAT CTGGATTTCT TCAGAAAGC ATGTATGANC GTATTCTCAC TGGTCCCGTT GTGAGAGAGG  
 AAGTAAGCAG GCGGGGAGA CGGCCTAAAA GTGGAATTGC AAAGNCACA GCAGCAGCAG CTCTGCAATC TGCCACCAGT  
 GTTTCAGSCA ATCCTTTTGT TTAAGCCAAT GGACCTACTT CCAGGNGTG GGNTCTACA AACTTNTTC AGGGCCTTAC  
 AACAAAAACC TACAA

SEQ ID NO:948: (Length of Sequence = 216 Nucleotides)

GGATGTAAGC TCCAGACAG ACATCTGGG AAGCTTCGGC ATCAACAGCA ACANTCAGTT GGCAGAGAAG GTCAGATTGC  
 NCCTTCNATA TGAAGAGGCT AAGAGAAGGT TCGCCAACCT GAAGATCCAG CTGGCCAAGC TTGACAGTNA GGCTGGCCT  
 GGGGTGCTGG ACTCANAGAG GGACCGNTG ATCCTTATCA ACGAGAAGGA GGAGCT

SEQ ID NO:949: (Length of Sequence = 369 Nucleotides)

CCCTTCCTCA AAAGATAAAA ATCTCTGGCA GAAGAAATAG TTACCTGCTG CCATCCATCA GTACTGCAAT TACCATGACT  
 CTAAGTGACC TTCTTGCCCA ATGTTTAATG CACAATGGAC CGTGCCAGG GAGACCTGGG CATNTCTGT TGCTTTGTTC  
 TACAATGATC CCTTCTGTTC TAGCAGCGTG ANTCAGTAT GGTCACTCTC TCTGAGGACT GTACGCATTT TCACCCTATA  
 TCCACCTGTA CCAGAAAACA TGGACATAAT TTAAAGTTA TTCTACTTA ATAGAGTGAT ATTCCAACCT GTGTGGGAAA  
 ATAACCATTN GTCACCTTTT AAAGGAATGG TATTTAACAT TTATTTATA

SEQ ID NO:950: (Length of Sequence = 288 Nucleotides)

AATGGTGAAA TAGAAGTCCA ATTACCTGGG GAACTTCAT CTTAACCTC TGAATTTNC AGTCTAACCT AAATATTGAT  
 ACTACACCTG CAGCAGCAAT TAGTTTAGCA TGTAAGTCT AAAAAATATT TNCATAATCT TTGGTTCCTA  
 AAATGTTTTT AAAAGAGATG CAGTGACATA TGCTGGAGT TTGCTTATGG CCAATAGGTT AATGCTTCTA GCTTCTATGC  
 TTATTGCAA TTTTAATTAT GTGAATATGC AATTTTCACT TATATTG

SEQ ID NO:951: (Length of Sequence = 302 Nucleotides)

TGTCAGATG TTACAAGAAC GATTCGGGA GTTNNCCGA NACACGGGA ACAITGGGCA GGAGCGGTG GACACGGTCA  
 ATCACCCTGGC AGATGAGCTC ATCAACTCTG GACATTGAGA TGCCGCCACC ATCGCTGAAT GGAAGGATGG CCTCAATGAA  
 GCCTGGGCCG ACCTCTGGN GCTCATTGAC ACAAGAACAC AGATTCTTGC CGCTTCCTAT GAACTGCACA AGTTTTACCA  
 CGATGCCAAG GAGATCTTTG GCGGTATACA GGNCAAACAC AAGAACTNC CTTGAGGAGC TT

SEQ ID NO:952: (Length of Sequence = 302 Nucleotides)

TTTTTTTTNT CCACTTCACA GTTGATGCCA ACCCAGCCTG CATCACAGAG ACACTTATAT CCACTGAGAC CTCCAGTACA  
 GTTTCATGG ATGCAGGAT TGCNCAGGCA TTCGTTACC TGINAGTAGC AGCTGGGGTG ATGGGGTCCC TGGGGCATA  
 TACAGCGGAA ACCATTACA CGTTGATAC ATGNGCACC CTGOGACAG GGATTGGNG CACACTCATC AATGTCAATG  
 TTACATCTCT GGCCTGTGAA ATCCTGGTGA GCAGACACAA CTGTAGCGAT TAATTGCCAT CC

SEQ ID NO:953: (Length of Sequence = 301 Nucleotides)

GAAAATNAAC TTGTTTGAA AAGTTAGTAT GGGTTAGAAA TGGGAAGAAA ATCTAAAATG TAAGAGTAAA AGCAAGGCCT  
 TCATGGCAAT CTCTTTTAAAT ATGGGCTTIN CTGTGTAGT TAACATCTGA TAATATGACC CCCCATCTA TTAATATTTA  
 TTATACTCAT AAAATTACAG AAAAAACCTA AGAAAGGTA TGTATTGAAG TGAATGAAT AAATGCAAAA AATGTAGTAC

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TTATAACATT TTGAAGAAAA TCTTTAAAAA TMTTGTGTTA CACAGAAAAT AATCTTAGAA A

SEQ ID NO:954: (Length of Sequence = 217 Nucleotides)

AGAGCTTAAA AATAGTGAAG TCTTTATAAG TAATTTTAA AAATTTAAAC TAGGACCATA AATTTCTAAA CTATGAGATA  
AATGANCAAG AAAACAAACA GGTGTTTAGG AAAAGGTATG TATATGGTCA ATGAAATAAA TACAACGTGA TTTTAAATGA  
GANTTAACAT ATTTTNNTTT AACAAAAGCA GCATGTAACA CACAATGTAT TATATGT

SEQ ID NO:955: (Length of Sequence = 260 Nucleotides)

TATTTGATAG AATTTTCTAG TGAAACCATC CTGACTTGGG GTTTTATTTT GGAGGAATTT TAAGTTATTA ATTCCGTCTC  
CTTAATAGTG ATAGGACTAT TCAGATTACC TTATTTTATA TTTGGTGAGT TTTGGTAGCT TGTGTTTCTC AAGGAAGTGA  
TCCATTTTCT CTAAGTTGCC AAATTTATGT GTGTATAATA ATTTGTAGTA TTCCNGTATT ATCCNTTTGA TGTCTGTAGG  
GTCTCTAGTG ATATCCTATG

SEQ ID NO:956: (Length of Sequence = 216 Nucleotides)

CCCTATTAAA TCATTAAGCA TTGCATGCAA TACTTTTINCT GTGAAAATTA TTAACCTCCT GGTATATAAA ATTATTTCTA  
GTTATGTTTA AATATTTCCN CTGGGATATT ATCATCTTAG ATCTGTAAAG TGGTACTAAA ATAGTTAAAA ATTATTTNTA  
AGATATACAC AAACAGAAAA ATATAAANC AAATGTATCT TATACATAGT ACTTGG

SEQ ID NO:957: (Length of Sequence = 353 Nucleotides)

TATGTACCAG GTGTGGAGCC TAGAACAGAC ACCAGTCAGA AGTGCAGATA AGGTCTGACT TTCCAGCATA GCCAGGGGAC  
TTGGCTGACT CCACATGTCC CCAGGCCCTA CCTAGCTGTA AAGCAGGCAG GTTGTGAAGT CATAGTGGCA GTTTATGAAA  
TATTTAGGGG ACCTAATAAT CTTTAAATG TATAACATTT CTGTCATAAA TTTCCCTTCA TGAATCCTTT CATGACTTAG  
ACCATCTATG ACATGCTTGG ACTTTCTGAC TTGTCTTAAC CACCCCTCTC TTTAAACAAC CAGTCTTTTT ACTTTAGGAC  
AAGAATTTAC CATACAAGAT TCTTTTGTAT AAA

SEQ ID NO:958: (Length of Sequence = 410 Nucleotides)

AAGGAAATGA ATTTGATAGC AGATTGTTAG AGATTAATTA CCTATCATAT GCCAAAGCCA CTTCCTACAT GTCAGTGTCTA  
AGGAATCCCC TAGAGATGGA ATTCCTAGGT TCAACTGAAA ATTAATTGTA ATTAATATAA TAGGTTAATT CATTTGTAATT  
ATTTTAAAGC CTTTGGCAA TGAGTTAATT CCACAAGATC CACATTGCTT GAAGTGTAC AGAGAACACT TGATGAGAAT  
GINCTAGTAA TAAACCTTAA CCTCTGGGG AAAAAATCCT ACTGTCTTTC CTTCTGGCTT CGTTCTTCTT GGAACATATT  
TNGGTGGCAT TTGGATATCT GGAGGACAAA GGGATCCCTA CAAGGTGGNT GCATAAACAT GCGTGGGCCC AGATGGACTG  
TGCTCATTTG

SEQ ID NO:959: (Length of Sequence = 197 Nucleotides)

GCCCGGCGAC CGTAGCATCT TCTGGACCAC AAAATAGAAC ATTGCCAGGC AAGGCAGGGC ATTTGGGGAA TTINAGAGAA  
AGCAGGATGA GTGATGGAAT TGGGAGGGTG GCACAAGATG TTAAACAGCA TATCTTAGTC CTCATCTAGG GTATAAACA  
GGACCCATGG ACTCTAGCAT CCTGGAATGA CAGAGGG

SEQ ID NO:960: (Length of Sequence = 345 Nucleotides)

AATAAACTTC TGTGTTTTTA AGCCACCTAG TTGTGGTCAC TTGTTATGGC AGCCTTTGGA AACCACACA CCCGCACATG  
GCGTGTAA CGCAGGCTGA TACAACCTTA AGAAAGGAAT GGNTGTGGTC ATCAGCAATC TCCAATACCT ACAGCAAATG

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GGAAGACAGG GAAGGACCAG AGGTGTAGGT AAAGCAAAAA GCCACAGGTC ATTAGGAAGT GATGCTCCAA CTGGGCATGG  
 AAAAGGAGTT TGGAGTTAGG AACACGACAG ATCTGTCTGG ACAAGGNTCC AGATCTCTCC TAGGGGGAAG NAGGGGCAAC  
 TTAGGACAGT TTTTGTGTCT GTGGG

SEQ ID NO:961: (Length of Sequence = 327 Nucleotides)

GCTGAAGAGG AACATGTGTC CTCGGCCACT TCAATCACTG AGTGTGACAA ACTTTCTTCC TTGCCCACAT CAGTGGGTGA  
 GGACCAATCT NTGGCCTCAC TTACAGCTCC CCAGACAGAG GAGACAGGCA AGAGCTCCCT GCTGCTTGAC ACAGTCACAA  
 GCATCCCTTC CTCCTGACT GAAGCTACGC AGGGCTTGA CTATGTGCCA TCAGCTGGTA CCATCTCACC CACCTCCTCA  
 CTGGAAGAAG ACAAGGGCTT CAAATCACCA CCCTGTGAGG ACTTCTCTGT GACTTGGGAG TCAGAGAAGA GAGGAGAGAT  
 CATAGGG

SEQ ID NO:962: (Length of Sequence = 369 Nucleotides)

AATTTAGATT TGCAAGTTTT CTACATTTTC AAAAACAAAA AACAAAAAAA CAAAAACAA ACAACAAGAA ACGTAGACTA  
 GTTGGGCTCT GTCATGCCA GGACATGAAT CAGCCCCCA TCCAGCTTCT CTGACCATTA GTCACITAGT GGTCTTCTTG  
 GTTTTCAGAT AGCAAGAAGG GTGATTACAG CACGATATTT TGACAGAGAC CACATTCACA TAGCTTTTAT TAGTTATTGG  
 TTGCTGTAA TCTCTCACTG TNCCTTGTTA AGCTTTATCA TGGTATCTAC GTAGAGGGAA AAAGCCACGG TATAGATATG  
 TAGGGTTCCA TACTATCCAG TCTCAGGGCA TCCACTGAGG GGTCTTCTG

SEQ ID NO:963: (Length of Sequence = 278 Nucleotides)

CTCAAACACC CGAGGCCGGG AGGAAAGAGA AGCCGATGCT TCAGAGCAGA CACTCCTTAG ATGGCTCCAA ACTTACAGAG  
 AAAGTGGAAA CTGCTCAGCC GCTGTGGATA ACGTTAGCAC TGCAAAAGCA AAAGGGGTTT CGGAGCAGC AGGOGACGG  
 GGAGGAGAGA AAGCAAGCCA GAGAGGCCAA ACAGGCAGAA AAGCTCTCCA AAGAAAATTN GAGATCTCCG ACTCGGCTCC  
 CCCAGCGCCG CTGGTAAAAG AAGTCACCAA GAGGTTTT

SEQ ID NO:964: (Length of Sequence = 349 Nucleotides)

ACACTCTCAG TATAGACAGT CGTGAAGAAC AAGGCTGAGG GATTTTNAAG TAAACCCATT TTCAGGATGA CTACAATCCT  
 TCCACTTCTA GAAACTTAG AAGTACAAGA AATAGCTCTA CTACGGGTAA CTGATTTAAC AATTTCCCAA ACACCCCTTC  
 CACTACCCAA GCCCGTGGCC CTCAGAGAGA ACCGGGATGG ATTGCCATCT GGGTTCAGAG GCAATATGAG GAGGTTGGGG  
 GGATGGCAGG GGCATCTCA GGGTTGGGGG GCAGGCCAAG GGGATGAGAT GGCAAAGGAC AGCTTTNGGA ATCAGATAGA  
 CGATCCAGCG TGCCTTCTTA CACTTGCAT

SEQ ID NO:965: (Length of Sequence = 361 Nucleotides)

AGCAGCAAGC CAGACGTGAC TGTCAGGAAC AAGCTAAAAT AGCTGTGGAA GCTCAGAATA AGTATGAGAG AGANTTGATG  
 CTGCATGCTG CTGATGTTGA AGCTCTACAA GCTGCGAAGG AGCAGGTTTC AAAAATGGCA TCAGTCCGTC AGCATTTGGA  
 AGAAACAACA CAGAAAGCAG AATCACAGTT GTTGGAGTGT AAAGCATCTT GGGAGGAAAG AGAGAGAATG TTAAAGGATG  
 AAGTTTCCAA ATGTGTATGT CGCTGTGAAG ATCTGCAGAA ACAAACAGA TTACTTCATG ATCAGATCGA AAAATTAACT  
 GACAAGGTCTG TTGCTCTGT GAAGGAAGGT GTACAAGGTC C

SEQ ID NO:966: (Length of Sequence = 163 Nucleotides)

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CTGCCTTCTG GGTTCAGCG ATTCTNATGC TTCAGCCTCC CAAGTAGCTG GGATTACAGG CATGTGCCAC CATGCCAGT  
TAATTTTGT ATTTTNAGTG GAGATGGGGT TTCGCCCTGT TGACCAGATT GGTCTTGAAC TCCTGGCCTC AAGTGATCCA  
CCT

SEQ ID NO:967: (Length of Sequence = 365 Nucleotides)

GTGTCACTAA TATGTTGTAC ATATTATTNC ATCACCAGG TGTAAAGCCC AGTNCCTAAT AGTTACCTTT NCTGCTCCTC  
TCCCTCCTCT CACCCCTCTG CTTCAGTCT ACCCCNGTGT TTTCTTCTTT GTGTCTCTAA GTCCTTATCA TTTAGCTCCC  
ACTTGTAGT GAGAACATGC AGTATTTGGT TTTCTGTTC TTTGTAGTT TACTAAGGAT AATAGCCTCC AGCTCCATCC  
ATGTTCCAC AAAAGTCATG ATCTATTCT TTTTATGGC TGCATAGTAT TCTGTGGTGT ATATGTACCA CATTTTCTTT  
ATCCAATCTG TCATTGATGG GGCATTAGG GTTGATTCCC TGCT

SEQ ID NO:968: (Length of Sequence = 390 Nucleotides)

GTGTATAGTA ATTTAATAGT AATTAAATGT AGAGTATTG TAAAAACAAG GAGAGGAAA AGAACAAATC ATATTTGAGA  
ACTCCTAATA ATCTCTAGA GCAGAGTTCA AAGAAGCAGT GGTAAAAATA AAGCCAAAGA GATATAGGGG CTAGTCTTAG  
AACCAGGACT TCCTATAGAA CCAGCTTCT ATAGAATCTG AACTTTATCT GAAACTCTTT CACAGATCTC CTCACCTTA  
ACTTCCACAA AATAAGAAAT TTGGATTTG AAGGCAAAT TGTATATTTT AAGGAGCAGG ACAATCTCAG CTGTATCTGG  
GTTTGAGAT ATCCAACAA TCCTACCAA ATCACTTTTC CAGCTGCAGA CTGGGAATTT CAGATCCAGG

SEQ ID NO:969: (Length of Sequence = 340 Nucleotides)

CAGACAGAAA AAGATTTGAA GAGACGGTC AGGAAGTACG GGAATTACTG GAGGAAGAAA AACTAAGTTG TGTGCCAGT  
CTCATCTTG CTAATAAGCA GGATTTGCTC ACAGCAGCCC CTGCTCTGA AATTGCAGAA GGACTGAACC TGCATACCAT  
CCGCGACCGA GTCTGGCAGA TCCAGTCTG CTCAGCTCTC ACAGGAGAGG GCGTTCAGGA TGGCATGAAC TGGGTCTGCA  
AAAATGTCAA TGCAAAGANG AAATAAATC TAGACGAATG GAGATGCAGG AGCTTCGGGA GCCGAATTCG GGCCTTAAAA  
ACACTAATTT GCTGCTTCT

SEQ ID NO:970: (Length of Sequence = 372 Nucleotides)

TTTTAAGATG GGATCTCAG GTTACCCAGG CTGGAGTGCA GTAGTGGTC ATAGCTCACT GTGGCCTCAA ACTCCTGAAC  
TCAAACATC CTCTGCCCT AGCCTCCCA ATAGCTGGGA CTGCAGGCAC ATGCCACCAT GCCTGGCTAA TTTTAAAT  
ATTTGTAGA GATGGGTCT CACTTTGTG CACAGGCTGT TTGCTTGATT CTAAAGAACG TATAGGGATC CAGCTGTACA  
GAGCTTCTG CAGCTTTG TAATAGAAAT AGTTGTAA ATGTACTTA TTACATGAGG CATCAAAGAC CTGGAATAA  
AGCTATNCC TCACATATCT GGGCCATTAT TTTGGACTTA CTATGGTTAC CG

SEQ ID NO:971: (Length of Sequence = 337 Nucleotides)

GACTATAGAG AACGCTGAAG TTTTGAATAA AAGACTCTAG GGTGAGCTTC ATCAGTGCTT GCTTTGGNTC CAAGATGTAA  
TGAGATTCTN CTTTCACGTC AACAAATGCC GCAAATNCTT TCACCTGAGT GGAGCTCGGA GCACCCAGTC TCTCTGCATA  
TAACCAAAC AAATTTGAAT CAAAAGGTA GATGTTGAGA GTCTTGTGG TCTGCAGCT CAGGCCTGTG AAGTTTGTGC  
TAGTCATGTC CACTTCTGGA AAGAGGATAC CTGINTCTCT CAATGTGAGG GAACGGGAGC TTNGGGGCAT CAACCTCACA  
TTTTCTCTC AAGGGGA

SEQ ID NO:972: (Length of Sequence = 396 Nucleotides)

TTCCTTTACA TCAAATATCC TCAATGGAAG AGGGGATATT GCACACAAAT ATCATAAAAG CACTACATAT TACTTTCACT  
GGAACTAAT TTNCTACATT AGATATGACT GGATAGGATA GAAGTGATGC AGGATTATAA GACATAATAC CATACACAGC

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TGCAGACTGA CACAAACACC ATTCAGAACA AGAGAGAGGA GTGTGAAGTG CTTCTCAGCT GGGCTCAAGA CCACTTCTTT  
CCAGTGCTGG AAAGAGGGGC TGCATGCAGT GTAGGAAAAG CGTGTCTCTG AACTGCCACA GGGTGTCTC GAAAGGGCAG  
CCCGGTCTTG ATGCCACTTC TCCATGGCTC CTGTTTTTGG GGGAGCTCCA AACAAGTGCA GAGAAGCTGC CTATTT

SEQ ID NO:973: (Length of Sequence = 401 Nucleotides)

TTCTCAAAC TCCAGTTCTC TTCTGGGCC AAGATCTGGT CCACCACTGC CGTGGCCTCC TTCCCCTGGC GGATGTC TC  
CCGCTCCTGA GCAGAGAAAC TTTTCTTCCC AGCAACTTCT TCATCTGATG GGAGGAGGGA ACTGAATAGC TTTCC TGA  
GGGAGATAAG AAAGAAGAGT GTGGTGTGAA CAGGGAGCTT TGAGCTGTGG AGTTGGGCTG GGCATGGAAA ATNCGGAGGA  
GAGTAGCAAG GAATGAGGGG CTTGAGAGAA CTCTNGGATC AGCCCTCCCA CACTCACTGC CCTTTAAGGT ATCTTTGGGG  
AAAAA AGGG GCTTCTATGA TGAGTCTGGC AGCTNCCAC ACTGCATTCT CCTCTGCAT TTTTTTACCA TGCACCAGGG  
C

SEQ ID NO:974: (Length of Sequence = 372 Nucleotides)

TTTACAAATG AACCACTGAG CACCTCAGTA CTTAGCTCAT ACCTCATACC TTAGTTCCTT AGTACTTAGC CTGTGCCAT  
CTTGAATGAG ATGGAGTGAA GTGAAGCTCG AAGGAGTGAC AGAGACATAG TCCTTGCTCT CAAGGGGTCT TTAGCCTGGT  
CTGGGGGACA AGATTTCCTC ATCTACCTCT TGAAAGGTGG CAGGACAACT CCACACTGGA GTGTCTCAC CAGCAGATAG  
GTGCTGCGGG AGTGTGGCGC CACATTCTTT ATAGCCACAG GCTTTGTTGG GACTTNCCT GGGGTCTTC CCTATTGGC  
TGGGTGGACC ATAAGCGCA AGTGAATGTG GCAAACCTCA ATTCACAATT AA

SEQ ID NO:975: (Length of Sequence = 340 Nucleotides)

GACAACAGAA AAAGAAGTGG ACAGCTACCC TAGATTCTAG CTCACACATA ATTCAGCCAG ATAATCATCA TTTAAATAAT  
ACCCCTTGAA ATTTTTCAGA CTTTTCACAG CTCATAAAAC ACAACATCAG ACATAACATC ACACATTGT TCCAAAGGAC  
TAAAAATCAA AAGCAATTGC AAAGTATTGG GAATCACTTT TATGGCTTTC CTAAGGGACA GTCCCATCT TTCCAAGGAG  
TGTTTTTAA GAGCACTAA CTCTGGTAGG TTATCAAAC ATTTTINAT TCTAAATAAA TAAAAGACTA ACTGAAGGTC  
TCAGGTGCAC ACTTATTTT

SEQ ID NO:976: (Length of Sequence = 343 Nucleotides)

CTGTCCCTA AATATTATTA AAATTTTAAA AATTAGACAT TTGGTCTAAA TTAGACAGGT AAGATACTAC TGTCCTTACT  
AGATGCTTTA AAGTCATAAA CTGCTTCTAT GGCTTTTINAT AATGTGNCAT CTGTCTGTCT TTAGAGCCAT TGGATTCTAG  
GTAAGGCCTA GAGACATTG GAGTTAGCCA TGTCCTCTAG CTATGCTAGA AAGAGTCCGA CATTATCTGT GGTTCGTGCC  
TGTATCTTAC ACTCTACACC TGATACATAA TTAAAATTAC TTACACTAAA AATAAAAATG GATGCATTTT TTAGGTAGGA  
AGGGTATGGG AAATTATAGG TTT

SEQ ID NO:977: (Length of Sequence = 265 Nucleotides)

ATCTTGTGAA TATCAGTGCC TAGACTAAGC CTGGCGTATA ATAGGCACTC AGAGATTGTA AGAATAAATG ACTAAATGAC  
TGTATCAAAT ACTGCCCCAT TGTTGCTGT TTCTGANTG TACAAGGCCA TCATGATAAT TGATGATCTT AATAATGTGA  
GAATATGATT CTNTTACCTT AGTAAGAGAG CCATCAGTTT ATTGGATGAT AGTTATATGG AAAAGAAGA AATGCTACTG  
TGATAAATAT TTATAATTTT AACA

SEQ ID NO:978: (Length of Sequence = 285 Nucleotides)

ATGGTGGGCT GCCCTGGCCG AGGTGGCCAA GATGGCACCT GTTCTCTGCC TCANAAGAAA AGGCACTGAC GCACTGACCC  
TTTINAGGTTG TGTGGGTGT GGTCACTGCC CTCTGCTG AGGGTCAAGT GTGTTTCAA GTCAACTTCA GCAGACCTCA



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TTTAACCATT TTTTNTTCCC TTAAAAAAA AAAACCCAAA AAACCAAATC CCAATAAATA TGTATTTTTT NTCCATCACA  
ATATTGCTTT AGAAAAATAA GAGCCGTCAA GCAGCAATTT TTCTT

SEQ ID NO:979: (Length of Sequence = 316 Nucleotides)

GTGCGTNCAC ACTCTCCTCC TGCTCCCCAA ACTCCTCATC ATTGAAGCCG AAGTGGTCAA TGAAGGCAGA GGTTCATGCGC  
TGCATCTGGA AGTCCATGAA GGCCTGCTGC AGCACAGCCT CCTCAGGGAA GTTGAATCC TTGAGCCGGT CGTCCCTCATC  
GTCACTGGAG GAGTGTAGGT GGTGGGTGTT CACCAGGTCC ACCATGTTCT TCTTGTGGT CTCGCCAGG GGCCCCGATA  
CGAAGGCTTC CCACTGCTCC TGCTGCTCGC TGGGCAGCTC CTTCAGCAGC TTGCCGCAGC TGCTCTGCAA TTGGGG

SEQ ID NO:980: (Length of Sequence = 386 Nucleotides)

AAACTGGCTT GCCTTCATCA TCTCTGCAGG GNTCAGTAA GATTAGAAAT GGATTATTTA CCTTGTATTA CAAATACACC  
TCTCCCTAC ACCCAAGANT TGAGAGGAAG ATGAGCTGTT CCTGTGTATA CGCCTGANTC AATCCCATTA TCTGCATTTT  
TGTTGTGGT TAGCGCTCCA GCAGCCTAAG GCGGGAGCTG GAAATGACAG CCTTGGAGAC GAGGAAGGCT CCAGGGAGGA  
CGGAGAGGAA CACCTGCTGA AGAATAAGAC GGGCGGCACC AGCCGGGCTG ATTTTGGGGA ACGGAAGGTA ACAGAGGGTG  
ATGCTTCTAA TCGCTTTTAC AAGGTCTTGG AAAGACGGGA TNGCCTTAAC CAACTTGGGG TTCTTT

SEQ ID NO:981: (Length of Sequence = 322 Nucleotides)

GTTTATTAAAT ATTAAACAT ATTAAATAA TACATGTNCA TAATGAAAAT GAAACATTAC AAATAAATAC ACAGGAAAGG  
CAGTATTCCC CTTCCAGTTC CACTCTTGAA ATAACCAAGT AACAAGATGA TGAACATCTT TCCATGATGT TCTCCAAGAT  
TCATATTATT TTTGCAATCA TACAATGGCA TATACAGCTC AGGTGCGGTG GCTCAGCAA GTAAATCCCA GCATTTTGGG  
AGGCTGAGGC GGGTGGTTCA CTTGAGATCA AGAGTTGAG GCCAGCTGA CCAACATGAA GAAACCCTGT CTCTTACTAA  
AA

SEQ ID NO:982: (Length of Sequence = 305 Nucleotides)

CCCAAGGCTG TAGTTCAGCA TCAACAGGGC AGGGAGCTG GCAGGGCAAG GGCAGAGCTG GAGATCATGC CCAGTNTTCC  
AGGTGCCCTC CCTCCCAATC AGCCTGGGG GCACAGGACA GGGATGGAGA AGGGGCTCTC TCCATGGCTT GGGTAACATG  
CCAAAGGCAG GTCATAGGGC AGACTCAGTG GGGGTGGGG CTTGGCTAAC AAGCAATGGA GAGAACGGGG GCCATCCAGA  
GAGGTTGGCA GAAGAGAGCC CTTGGGTCAA GAGAAAACIT TGGGAAGAC AAGACACGGG AGAAG

SEQ ID NO:983: (Length of Sequence = 399 Nucleotides)

AGCCCTTGTT TTGTTTTTAA AAGCTGTCTG GTTACTGCTT AAAGTCTCCA AACTGTTATT GAGAACACTG ACCAGAGCCC  
TGTCCATAGA CCAGTGTITT TCCAAGTGCA GATTGCAACT CTTTTCAGCA GTAGGTTGTG GAGCCATTIN AGCTGACTAC  
TCACCAGCTT TCTTCAAAAT GTAAATGGAA TAGGATAGAA AAATAATGAA AAATTGTAAA GTGAATTGGA TGCAAAAAGG  
GTAAATATIG TNGTGTGAGA CTTTTTGGG TGAGTGTGCA TGTGTTTACA TACTGGNTCA CATTATAACA TGTATTGCTC  
ATTATGGGTT GTGGTCAGAA AAAATTACAG AAACGCTGTC TCAGACTGTC CCCAAGTTGT ATTTGCTTAT AATGGGACT

SEQ ID NO:984: (Length of Sequence = 408 Nucleotides)

GTGGTATGAG GTATCAATGA AATACATTTA AGATGTACAT TGGTTTGT TT CAGAAAGGCG AGACAAGTCA AAGCGGGGAC  
TTCCAGGCTA TAGGTAAATT TATACATTTT CTGGTTAAGA TTGGTTGAGT TTGTCTAAGG ACCTGGGATC AACAGAGAGG  
AAATGTTTGG NTTAAGACAA GGATTGTGGA GACCAAAGTT TTAATACGCA GAGGAAGCTC TTAGCTAGCA GGCATAAGAC  
AGAAGAGGCT GTAAATGTT TTCTTATGAG ACTGAAAAGG GTGCTGACT CTTAATTGAT TATCTCCTGG NTCTGGAAAG

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AAAAAAAAA GGAATGGCC AGGTGCGGTG GCTCAGGACG GGTCTGGTGG CTCACACCTG TAATCTTTCT TAAAACGTTA  
TGAAGTTC

SEQ ID NO:985: (Length of Sequence = 439 Nucleotides)

TGGIATACTT TGTNTTTTT TTCTACTTGT TAGTTGTATT AGTATCAAAT GGCATAATAA AGTTACTTTG TTTGCCATTT  
CCCACTCATC TGAAAATCAC AAAAAGCATT TATTTCTAAG ATTTATATCC ACTGACCTTT TCCCCAAAGT TATTTTCCTG  
TACTTGTAT TTCATCTTTG CCTTATTTT TTTAATATTT GTATTAGAAT TAGCTTGCTC TTGTTTCCTT CACGGCAAAT  
GTGTACATT GCCCACTGGG TGGCTTCTGC GGATGCCCTT ACCCACCCTT CGTCTGGAGC AGAGAAGTCC TGTTAGCCTA  
GCAGCATAGT GGCTGCTGTC AGTGCGAGGA GTTGTCCTTC TCTAGCATGG TCTGTGATGT CATCTGGACA TAATTAATTA  
GACTAATCCG AATAGAGGAC CAAGACAGCC CTGCCTGCG

SEQ ID NO:986: (Length of Sequence = 286 Nucleotides)

CGGCGACGAA CATGGAGAA TCCAGCTTG GAGCGCAAGT CCTCCTGCGG GAAGAAGTGT CGCGGCTCCA GGAGGAAGTT  
CACCTTCTCC GGCAGATC TAGATGTTG GCGAAGGACC TGGAGGAGTC GCAGGGCGGC AAGTCTCTN AGGTCTCTC  
GGCCACCGAG CTCAGGGT CTGGCCCA GAAGGAGCAG GAGCTAGCCA GAGCCAAAGA AGCCTTNCAG GCCATGAAAG  
CTGATCGGAA GCGCTTAA GCGAGAAGA CAGACCTGGT GAGCCA

SEQ ID NO:987: (Length of Sequence = 381 Nucleotides)

TCCAAAGGTT TTCATCTG TGGATAA ACAAACTG GTACATCTAC ACAATGGAAT TTGGGA GATGAAACAG  
AATGINTGAG GGCACAT CATGTAT GGTCTG GTCTGCCCTCC CATTNCCA CAGGCA GTGTGCT  
GGGTGAGGGG CTGGGAGT GGCAGGAG CATCTAAC AAGGGTGGAA GCGAAGA GAGACCAG TCCAGGGT  
GINTCACATG GTACAACCAA GAGACTTGGC GTGCTAGAA CCAAAGAAAC ACTCAGGACA CAGGACAT CTGCAGGGAA  
CCTGGGGGGT GGTGAGGAAA GTCGTGCACG GGTGCTTGGG GCGAGACTTG GAGGCCCTC T

SEQ ID NO:988: (Length of Sequence = 381 Nucleotides)

GAATTAATAC CAATAGAAGG GCAATGCTTT TAGATTAAAA TGAAGGTGAC TTAAACAGCT TAAAGTTTAG TTTAAAAGTT  
GTAGGTGATT AAAATAATTT GAAGGCGATC TTTTAAAAAG AGATTAAACC GAAGTGANIT AAAAGACCTT GAAATCCATG  
ACGAGGGGAG AATTGCGTCA TTTAAAGCCT AGTTAACGCA TTNTCTAAC GCAGACGAAA ATGGAAAGAT TAATTGGGAG  
TGGTAGGATG AAACAATTTG GAGAAGATAG AAGTTTGAAG TGGAAAACGT GAAGACAGAA GTACGGGANG GCCTCCTTCA  
TGTTTACAAT TTTAATTAAT TTTTTTTATT TTAGGTGTA TTTCTTACCA AACATTACCC A

SEQ ID NO:989: (Length of Sequence = 432 Nucleotides)

GTCTTGGGCTCTGCAACCT CTGCCTCTTG GGTTCAGCG ATTCCCCTGC CTTAGTACC CAAGTAGCTA AGAT 3  
CATGCGCGCTCTGCTGGC TAATATATAT ATATATTTT NTAGTTTTA GTAGAACGG GGTTCACCA CGTT 3  
GCTGGTCTCG AACTCCAGAC CTCAAATGAT CTGCCCGCT TGGCTTCCA AAGTCTGGG ATTACAGGCA TTAGCCACTG  
TGCTTGGCCA ACAATATATA TTAATAAGC ACACATACAA CAAAGTAGG TGTGGTAAG CTTACAAAAA TGTGACCACT  
AGCTTGTGTA AACCTAATT TTTATTTGTT CATGGAACCT TCTAGACCGT AACTACACTG AATAATGAGA ATCTGCTGTA  
ATCTTTTTTA GGTGCTGTAG ATGAGCCATT GG

SEQ ID NO:990: (Length of Sequence = 421 Nucleotides)

GGCAGCCCTA CTTTNTCTC TCATTAGCAG TTTCAGTCCA CAGCTGGGGT ATTAAATTTG TNAGTCATTG AAATTAATCC  
CTGACTGAAT TGGAAAGGAA TTGTATTGTC AGTATTTGGA TTTATTTATT TTNCAGGTAT GGAATCTCG TGATTTTGAA

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AACATGAATG ATACCATTTT GCAGCAGCAT TGTAGATTG TAGTATTTTA GATTGGTATC ACAGTGCACC TGAAAAGTAA  
GTTTCATTTT ACITTTTTNA TTGTGTGTA GACGGAGCTC ACTTTTGTCA CCCAGGCTGG AGTGCAGTGG TGTGATCTTG  
GCTCATGGCA GCCTCTGCCT CGCTGGGTTT AAGCGATTCT CCTGCCTCAG CCTCCCGAGT AGCTAGGACT ATAGATGCTC  
GCCACCATGC CCAGCTAATT T

SEQ ID NO:991: (Length of Sequence = 351 Nucleotides)

CCTCACTCCC CGCGCTGGCA CCTCAGGTTT ACAAGAAGAA CTAGGAAATA ATGCCGGCCA CGCGACCCCT GGAGAGGGGG  
CCGGCTAGAA CAGCGTTCCT AAGAATCCGC GCCACAGCAG GTCCCGCGAT GTTGGGGCCT TAGTGTCAATC GAGCTAGCCC  
CAATCCTCAA CCGATCTTC AACTTCTGGT AGTCCTAACA GAAGTCTCGT ATTGAACCAG CCACTINTGC CAGGGAGAAG  
TAATCCTCTG ATAGTIGAGG TTCTTTNCTC TCCTCTGGAG CAGATAGTGG TGTCTCTCC CCACAAAGCT CATGTTCTGC  
TGGAAGAAAT GGAGATGGCG CCTGGAAGG C

SEQ ID NO:992: (Length of Sequence = 406 Nucleotides)

CCAGAAAAA TGGCCACTAC TACCACTTGG CTCAGAAATG CTAGTCTTTA TTINCTGAAA TGTTTTATAT AGAAAAAATT  
TAATAATAAA TAGACATTCT TATATATTTT CTTACCATTT NAGATTGGGT TAAAAAGTAT GNGACTTCC GGCCGGGTGC  
GGTGATTCAA GCCTGCAATC CCAGCACTTT GGGAGGCCGA GGCAGACAGA TCATGAGGTC GGGATCTGTG GCTAACACAG  
TGAAACCCCG TCTCTATTAA AANTACAAA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCGGCCACCG  
CGGTGGAGCT CCAGCTTTTG TTCCCTTTAA GTGAGGGGTT AATTTGAGC TTGGCGTAAA TCATGGTCAT AGCTGTTTCC  
CGTGIG

SEQ ID NO:993: (Length of Sequence = 381 Nucleotides)

ATGGAAGGAC CGTGCCGGGA CCCCAACGAG GCANTGCGGG AGTTTGCCAA GGAAATTGAC ATCTCCTGTG TCAAAATTGA  
GCAGGTGATC GGAGCAGGGG AGTTTNGCGA GGTCTGCAAT GGCCACCTGA AGCTGCCAGG CAAGAGAGAG ATCTTTNIGG  
CCATCAAGAC GCTCAAGTCG GGCTACACGG AGAAGCAGCG CCGGGACTTC CTGAGCGAAG CTCCATCATG GGCCAGTTCG  
ACCATCCCAA CGTCATCCAC CTGGAGGGTG TCGTGACCAA GAGCACACCT GTNATGATCA TCACCGAGTT CATTGAGAAT  
GGCTNCCTGG GACTCCCTTT CTCCGGCAA AACGATGGC AGTTTCACAG TTCATCCAGC T

SEQ ID NO:994: (Length of Sequence = 384 Nucleotides)

GTTCTTCCAG TTGGAAGGA TAAATCAAA TTCCCACTTT CTGGGGTGGG TGCCCAAAC CTTCACAACT CAAGTGTCTT  
CCAAGTGCAA ATGTCAAAT GGGAGGAGGA AAGGGTTTAA AAATTAGAGA AAAGTGTATG CACTTACGGA CTTAAAAATC  
CGAAAAACAT AGTAAAAAGA CAAAAACA TAGCATTATG CTCTGAAATC ACAACCAAAG CCAAAATAAA AGGGACATTT  
TTCACCTAAA CTACCTAGAG GGATTTTTTG TTTAGTTTTT CCTTTTCTT TTTTTTTTCA TTTTCCAGTT AAGTCTATG  
TCTTTNGTGA AATTCCAATA CTTAACTGC AAGTCTGCAA TCGTCTCTGA AGTCAGTGAA ATTA

SEQ ID NO:995: (Length of Sequence = 386 Nucleotides)

ATAACTTTAA CAGAGGATTG GAATAATGAG GGATTGGCAA GGAAGCAGTA AAAGGGAACA CTAAAGTATA GAATAATAGC  
AAACAGAAGG AGCACCTTAC CCTAGGGCT GAGAAAGAGC ACAGGGAAGT CCTTTTTTNT TCCTGGACAG AGATCCAGAC  
GAGCTGGAGA AAGAAGTTGC TATGGTACTG CATCANTGGA ACTTGCTGGA AATCCACCCT CAAGGGCACT AGGAAAACCT  
GTTCAGGGGA GCTGTGGAGG GAAATGGGGT TGGCAGGAAA GCTGTGGGC GCGGGGTGCT TCAGACTGCA GTGTATTGCA  
GGAGCTTGGG CACTGGGGAA GCTGTGTGCA CTGCAGGATC CTGCTGAGCC AGCACATCAG ATCAGG

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SEQ ID NO:996: (Length of Sequence = 307 Nucleotides)

GTGCGCCAAC TGCAAGAAGG AGGCCATCTT TTAGTGCTGT TGGAACACCA GCTACTGTNA CTACCCCTGC CAGCAAGCCC  
ACTGGCCTGA GCACATGAAG TCCTGCACCC AGTCAGCTAC TGCTCCTCAG CAGGAAGCGG ATGCTGAGGT GAACACAGAA  
ACACTAAATA AGTCCTCCCA GGGGAGCTCC TCGAGCACAC AATCAGCACC TTCAGAAACG GCCAGCGCCT CCAAAGAGAA  
GGAGACGTCA GCTGAGAAAA GCAAGGAGAG TGGCTCGACC CTTGACCTTT CTGGCTCCAG AGAGACG

SEQ ID NO:997: (Length of Sequence = 402 Nucleotides)

TCTGCACCTA ATACTGAGGG TGTGAAATCT TCCTCAGTAA TGCCAGCCCC TAGTACCACA TTAGCGCGGC AAGGCAGTCT  
GGAGTCACCG TCGTCCGGTA CGNGCAGCAT GGGCAGTGCT GGTGGGCTAA GCGGCANAGC AGCCCTCTCT TCAATAAACC  
CTCAGACTTA ACTACAGATG TTATAAGCTT AAGTCACTCG TTGGCCTCCA GCCCAGCATC GGTTCACTCT TTCACATCAG  
GTGCTCTCGT GTGGGCTGCC AATATGAGCA GTTCCTCTGC AGGCAGCAAG GATACTCCGA GCTACCAGTC CATGACTAGC  
CTCCACACGA GCTTCTGAGT CCATTGACCT CCCCCTCAGC CATCATGGCT CCTTTGINTT GGACTGACCA CAGGCACTCA  
CG

SEQ ID NO:998: (Length of Sequence = 304 Nucleotides)

GCAGTCTGT GATTGTAAG ACTCACAACC ATGTGGAGAG GCCGAATCAC GCAGGAGAGC CACGCATTGG AGTACCCCTGG  
CTCCAGCCCC CTTCCCCACC CCGINTTGAG CCAGAGAGCT ACAAGCAGGA ATCCAGTGC AGCTGCAAAT NATGGCCATC  
GAGGAAGTCT GTGGAGAAGA GGCTGGGGGC TGTGGTGCTG AGGGGGGCTA GGCTCAGCAC GGGACCACCT GACGACAGCT  
CCCAGCCAGT CCATGCTGTC CAGGTGGCCA TCAAGCCAGG TTCCAGGGCC CATGGGTGCT TGCT

SEQ ID NO:999: (Length of Sequence = 321 Nucleotides)

AGAATGGTTT TGGAGCTCGA NATCTTCATG GGTAGACTT GCTGGTCAGA CCCAGGAGCA CCTGTGGCTC ACACCTTCTG  
TNCCCTCCT GGCTGTGCA GAATGTAAAC AGCAGACTCA TACTCAATGG GCACTACAGG CCTTATCAGA CGTTTATAC  
AAGCCTGGAT TGCTTAGTAG GGGGAATAAG CATCTCTGA GGGGGCTTTC CACTTAGATT GAGAATTTTA TTTGAAAAGA  
ATCTGGTTTA AATGGCATG TGGTCOGAGG TAGCTGCTCT CCCCCTGAG AGCTGAGCCG AAATATAAGA ATAATATATT  
T

SEQ ID NO:1000: (Length of Sequence = 253 Nucleotides)

CCCTAGAGGA TTTCGGTCT TTNATCTGCC AGTGACCTGA ACCACGCAGA TTTTCAAGC AGGAGGGCCG ATTGGGCAAC  
CACAGCTCCC GTGCTCTCTC TTTCAGTGC GCGGCTTTC CTCCGAGAAG GACTTTGAGG ACTACATTAG GTACGACAAC  
TGCTCGTCCA GCGTGCTGGC CGCCGTGGTC TCGAGCACC CCTTCAACCA CAGCAAGGAG CCCCTGCCGN TGGCGGTGAG  
ACGTGCGGCC GGG

SEQ ID NO:1001: (Length of Sequence = 164 Nucleotides)

AAACAGAGTA CTGGGATGTC ACTGTTGGAA AGTGCTCACA ATTTCTCATC TAAGCCGAAG TTGTCTGTC TCCTTCCTAC  
CTTAACAGTT TCTCAGTCC TGAAGGCAGC TGCCAAAACC CCTTAAGCA AGCAGCACTC TTACCCACCA AAATCTATGA  
CCTC

SEQ ID NO:1002: (Length of Sequence = 262 Nucleotides)

ATATCTTCCT GAGGGAAAGT GGTAGAGTTA AAGAGGCAT AGAGAGCGCA CTCATGCATT TACAACCTCAG AATTTTAAAA  
AAAGTTTACA TTTTGTCAAT TGTACTTCAG ATGAATTTC TTATTAAAAG AAATAAGGCC ACAGAGGTAA ACTTAAGTCT

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CCTGTTTCCC AATGCCTACC CTCCTTCTTC TCCTTTCTTC TTTCTCTTC CTAGAGAAAT CCTGCCTTCC TTTCCCTTCC  
CAGAGGCAAC TGGCATTATA AT

SEQ ID NO:1003: (Length of Sequence = 267 Nucleotides)

GGAAAGAGGA GCAGGTCTGG AGGTTTGTGG AACCCAGTCC CCTGCAGAAT CTGTAAAACC TAATAAATCA TGGTTGTGGC  
CATTCTCAGC GTGGTGATTG TAATTAGACG ACCCCCGGGA AGCCAGACA CTCGGGGCCT GGAGTTCTTC CCCCTGCCTG  
ACCTAGAAGC AGAACCGTTT TCAGCGNTCT GCCCTGTTGG CTTTAAGGCT TTGTCTTAAT TTAAGGAAA AGATCCTCCC  
GGGTTTTATT TCTCTCTTC TTGAGTG

SEQ ID NO:1004: (Length of Sequence = 277 Nucleotides)

GGCTCCTAAA CACTTCTTC CTGAGATGTT AAGCAAAGTA ATCATCCTGT CACTAGATAG AAGCGATGAA GATAAAGAAA  
AAGCAAGTNC TTTGATCAGT TTAATCAAAC AGGAAGGGAT AGCCACAAGT GACAACTTCA TGCAGGCTTT CCTGAATGTN  
TTGGACCACT GTCCAAACT GGAGGTGAC ATCCCTTTGG TGAAATCCTA TTTCACAGC TTTCAGCTC GTGCCATCAT  
TTCAGAGCTN GGTGAGCATT TCAGAACTAG CTCAACC

SEQ ID NO:1005: (Length of Sequence = 271 Nucleotides)

GTTAGGTCAT TCACACATGG TGGAGACAGG AATCTACAGA CTAGGGATCA GCCCAAGGC TATGATCTTT GTNCTGCGCC  
GCTCTACCCC TGAGCAGACG GGCCAGAGGT CCAGAGAGGG CTGTGCTGGC AGAGTTCATA CTTTGATAAC TGAACCCTAG  
AGTAAGCCTG CCGTGGGAAA TNCAGCTCA AGGGACTGAC AGGCATAATG CTCCTTGGGA GAGAAATGCC ACATCTGCAG  
CGACACGNAT CCTTAACACT GTCCAGGAC T

SEQ ID NO:1006: (Length of Sequence = 336 Nucleotides)

TATTTTNCAG ATATGGATAA AAATTGCTTA GGAGAGTAAA GAGAGACAAA GTTGAAAGCA GGTTTATAGT AGGTGTGTGT  
TTAGTGTGA TCCCTTTTTG CTCCAATAAT CAAAGTGATA AATATTGAAA ATTGATTCAT GCAGCATTC TTAATCCATT  
CTAATTTTNA TATATGTCAA AAGTGCCATC TCCCAAACCTG TGCTATCCCC TTCAGGAGAA GAGACTCTGC TGAAGTTTAT  
AAGGTGACA TATTGCCAGC TTCAATAATG TAAAGATGAA GTGTATACTG GAATTCCTAA TGCAAATAAC AACTCTTTTG  
GGAAGTAACC CCGTTT

SEQ ID NO:1007: (Length of Sequence = 355 Nucleotides)

GGCAAGAAGG CGTCGGCGGC GCANTGCGGA TCCAGAAGGA CATAAACGGC AGCTTGTTCC TCCAGGCTGG TGGGCTTNGT  
GCCCTCGGCC TTGGGATGCT TATCACAGTC CTTTGGGACC AGAACACTGG ATATCAGTNC AGCCTCTGGG CCAGCTTCAG  
AGGCTGTTAG AGCATCATTC CTGCTGTGGC TGATGCTTCC TTTCTCAGT AAATCACAAA AGTCGTGTTC GCCATCCAGG  
TTACCGAGTG ACTTAATTTT CAGAAAATTT AATATTGAGG TCATTATTGT ATGCATTTTC ACTGTTGCCA TTTTGTATC  
CTGTAGGTA GGTCTATGAA GTACCACTGG GGTCA

SEQ ID NO:1008: (Length of Sequence = 269 Nucleotides)

ATATTAAAG AGAGCTTTGG TCAGTAAAAG TATAAANCT GAGCTTTGGT AAGGGTACAG TTTATAAGGC CTAGAGAACA  
TCAAAACATT CATTTCATAT TGAATGTATA AATACCCACA TGTGAGAGCA CATGTTGATT CAGTTTGAGT ATGCTGCCT  
TGTGCTCTT TAAAACCTTT CCAGCCTGGG TTATTTTCCC AAGCTTCTT TATAATTACA CCAGGGAAAG AGTTACCNGG  
NATTAATCAA AACCAGACAG TGGACAATG

SEQ ID NO:1009: (Length of Sequence = 295 Nucleotides)

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GATAGCAGCA ACATACGTTT GTTTATTTCAT TTGCTTACTT ACAACAAACG TTTATTTCATT ATTTATAATG CAACAAGCAT  
 TAACCTAGGT GCTAAGGAGA GAAAAATGAG TAAGACACAG TTTCTTTCTT CAAGGAAATC ACAGTCTGTT GGCAGAGATA  
 AGTAGTAATG GTGCCTAATA TAGGTAACAC TTGCTACCTG CTCGAAGAAC AAAGTTAAGC AAGTGATTAA GTTAAGCAAT  
 GCTTAGAGGT AGAGGATGTA AGANTGGCCT TAAAAAATGT GTCTTCTGAG ATGAG

SEQ ID NO:1010: (Length of Sequence = 356 Nucleotides)

GTATTTCTTC ATTTGTGCAA ATNAAATAGA AAAGGTAAAT NAGAACTCA AGAGGTTTGT TACCTACTGT CAATGGAGTG  
 GGGAAAATGG GTGGAAAGAA GAAGGCAATA AGAAAAGAGT AACAGGAAAC GACAGTNGAC ACTTCTGAGT ATACCTTGTG  
 GAATCTCTTT CACTCTTAGA ATCATAGTAA TAGANGANGA AAAAAGAACT CCCCAACTG AAAAGGATAG ACCACTGGAA  
 CAACTTCAAG TGGTCTAATG TAGAAGCAAA TGGAGTCCCT CAAGGAAAGA AGAGAGGTTT TGAAAAGAAA AAAACATTG  
 AAGAGTTAAC AGCGAAACAC TTTCCAACT TAAAGG

SEQ ID NO:1011: (Length of Sequence = 315 Nucleotides)

AGAGAGACAC AACTGTAATA GAGACACAGA GGAGTGGCAC ACAGAGACCA CCTCCAGCT GGAGACAGTC AGGAAGGACT  
 GAGGGAGAGG GGACAGCCAG GGCTCCACAC CCAGGCAAGA ATGGGGGAGG GCTGTGGAA CAGAGAAGTC ATCAACACAC  
 ACAGTTCAAA GTCTACCTTA GGCTAGGAGG GGGAGCAGGA AGAAGGGGCA GGGACGCAGG GGCCCGGCT GGNAGCTCCC  
 TGTTGGCCTC TNCTGCCCCC TGCTGGCTCC CNCTGCGGTG CTCAGGCAGG AAGAGAGGAG GCTGCTGTTT TTAGG

SEQ ID NO:1012: (Length of Sequence = 272 Nucleotides)

CCCAACTCTA TAGCCCTAGT CAACCACTAA TCTATACCTT GTNCTCTATA GATTTCCTA GTCTAGAAAT TTTGTATAAA  
 TGAAATGCAT GCACTTGAAC TTTTGTATC TGGCTTGCTT TTCCATTAG CATAAAGTTT TAAAGGTCN CATATGTTGC  
 TGCATGTGTG CATTTCTTTT TGTGNACTGC NATATTACAT TGTATGGGAT ATACCATTTT GCCATATTTN GTTAAATCCA  
 TTCATCCAGT TGGTGGGACA GCAGGTTATT TC

SEQ ID NO:1013: (Length of Sequence = 252 Nucleotides)

TTTGTTAGTG TTTTCTACAC TACACTCAAG TTCATTGAGC ATGTTCATTTT AACAAATGT GACGTGTCAA CTTCAAAAAT  
 TAAACAAACC AGCNAACAC AACACTTGNC ACTACAAAGG AACTTGTTTT ATTCTCAACC TTCTATGATA GCTAAACTTC  
 TCTGNAATTT NGTTCCCCCA CACATCCCAC ATCTGGGCTC AATTTCAGC TTCTGTINTT CTGTTTTATT TCATCCAAAA  
 TGTATTTTAA AT

SEQ ID NO:1014: (Length of Sequence = 210 Nucleotides)

GGGATACACT GACAGTAATG TGAAGCGCCA CACTTGCAGA TTTCAGGCC AGCAGGTCCT GGNCAAGTGC CATTCCACCC  
 GGAACITTTA ACCCAAGCGG TGGGGAAGGA AAGCCAAAAC TCCAAGCTGG CACTTTTTTG GGGTCTGGG CCATGACACT  
 TCTTAGGCCT TCTGCTGCTG AACTTTTACA GGGACAAAAG GTACCCACG

SEQ ID NO:1015: (Length of Sequence = 222 Nucleotides)

GGNAAGAAAG GTTTCTCAGA GGACAGCCTT ATTAATTTCT CAGAGGATGA ATTTGNACAA TGGCAGCACG TTGCAGTCAC  
 AACTTCTTAA GGTGCTTCAG AGGCTGATTG TTCTAGNAA CACAGAGTAA TGAACATTC CTGAAGAGCA ATGAAACAGG  
 TTTTGAATTT TTTGTATCT GNACTTAGNA ACACATCAGT CCCCATCAAC CCATGGACTT CT

SEQ ID NO:1016: (Length of Sequence = 236 Nucleotides)

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GAATAAACTG GTTTGGAACC AGAAAAGTAC AAAAAAGAAC AGCTAGAGGT ACATAGACAC AGGACAATTA ATCAATTTGG  
GAAAAAAGAA AGNACTTACT TTCTCCATTG CTGCCTGAAT TGTTTCCCAA TCTGCCTTGA AATGCCACTT TTGGCCAATA  
TTTTTNCAAA AATTGACCA AAAAAGAAAA AGCACTNAAT TTCCCTTTTT ATACAAAAT GNTTAAGTAG GCAAGT

SEQ ID NO:1017: (Length of Sequence = 259 Nucleotides)

GCTTCCCTAG ATTTTCCCT AATTTTGGAC CTATGTGGAC AAAAAAATA ATCTAGTCCA AGCTTTCCT ACCTTCTTTT  
TTTATTCGCC TTCTGCTTCT GNGTTCCACA TGGGAACITG AAGTGGTTTA TAAGAATGCC ATGCTGTGCA AATAGTAAAA  
ATGAATTTNC TGATTTTAA AAAAGCCCTC AGGAACGGCA TATGTATANG GTATGTATAT GAAAAAANGT GTTNAGGAAT  
GCAGGAGGGA AACTAGGCG

SEQ ID NO:1018: (Length of Sequence = 354 Nucleotides)

CTGGAGGAGG AGAAGAAGCA TCTGGAGTIT ATGAATCAGC TAAAAAATA TGATGACGAC ATTTCCCAT CCGAGGACAA  
AGACACTGAT TCTACCAAAG AGCCTCTGGA TGACCTTTTC CCCAATGATG AAGACGACCC AGGGCAAGGA ATCCAGCAGC  
AGCACAGCAG TGCAGCCGCG GCTNCCCAGC AGGGCGGCTA CGAGATCCCC GCGCGGCTGC GGACGCTCCA CAACCTGGTG  
ATCCAGTACG NCTCGCAGGG GCGCTACGAG GTAGCTGTGC CCTTNINCAA GCAGGCCCTG GAGGACCTGG AGAAGACTTC  
AGGACACGAC CCACCGGAC GTGGCCACCA TGCT

SEQ ID NO:1019: (Length of Sequence = 393 Nucleotides)

GATGACCGAT TTGGCCATGG AAGACTTATC TTCATGGCAC AGAGAGNYTG TSCAGAGATG AGTCAGACTC AGGGGCTGAG  
TAACAGCAGA GCAGAGAGTG CAGAAGTGA CGCTCAGAAG CGAGTTTTATG TGTGTITTY CCTCIATCTG CTGGCTGIGG  
CTGGTACTGC AACCTATCCC AAAGTAACAG CCTAGTCAAT GAGGTATATG CTTCAGATCT GGCAAACTCT CTCTGCACAT  
AAAAGTGTTA TTCTTAGTTC TCTGAAAGAC CCCACATCT TTGAAGTGTA AACTAAGAGC TACATTTTCC CTTTTACTAC  
ATCTCCCTTA AAAGGAAAGC ACTACAAGAG CTTTAAAATA GCAAGCTTCC CTATCTAAG GGGAAANAGT CTT

SEQ ID NO:1020: (Length of Sequence = 403 Nucleotides)

CTGAGGAAGA GAGGTGAAGT GGCATCTACC CAAACACCT GTGTACTGGT TAATAAGGTC GGTAGTTCCC ATTAATGAGC  
TTGATGAAGG ATGGCACCTG ACAGGGCCTT AAATGANCTG ATGGAGTGAA TGTNACCAGT GTGAATTAAA TTTCCTTTAT  
ATATAATAAA TAGCTGTGCT TACACATTTT CAGATTINCT TTGTACGCTA TGGACATGGA ACAGCGGGAC TATGATTCTA  
GAACAGCACT CCATGTAGCT GCTGCAGAGG GTAATACAGG AACTACTCCT ATCTATTTCC TTCCAGATT TAATTTCTAC  
TTAGTACTAA AATCTGCTCT TTTTPTGGGG GTGGGACGGT ATAGGTCATG TTGAAGTTGT TAAATTTTTT NCTGGAAGCC  
TGC

SEQ ID NO:1021: (Length of Sequence = 452 Nucleotides)

ATCGCAACCT GGCAGGGGTG TGGGGTTTGC TGGGGGCCTC TGTGGGGCCA TGATCTGAGG AGGGTATGTG GGGGGCGGGA  
GCTCAGCACA TTCCATGGCC TAGAGGGGCC ACACAGAGGC CCCAGTGGGA CCCATGGOGT GGAGGCAGGT ATGGGGAGTT  
KTGGGGAGAT CCCAGGGTGG TCTGGGGCCT GGAACCGGCC ATTGKGAGGC CCCAGCAGTT TCAKTGCCCA GGGCCTCCCT  
GCAGAGCCAT GCATGGCAGA AGAAGTGTGT AGCATGAGCT GGTACACGCC CATGCCATC AAGAAAGGCA GTGTGGTTCAT  
GGTGTGGAC ATCAGCAGCA ATGGCCTGGG GACCTTCATT CCAGATAAAA GGTTCAGAT GATATCAACG GCTTCCTGAA  
GAGAGACCGG GGCAATAACA TCCATTTCANT TGGGAGAGGA GGTGAGGGAT NT

SEQ ID NO:1022: (Length of Sequence = 413 Nucleotides)

AGCAACAGAA GAAAGGGCCA CATATATGCA AATGCCTGGT CACTATATCT GGCCCTGAAG AAGGAAGGAG TTTGCAGGGC  
 TCAGGAGACT GGAAATTTTT NCCAGGAGCT AGGAACGAGG GGTGGGAGA CGTTGGTCAA AGGGTACAAA GTCCCAGTTA  
 TGCAGGATGA ATAAGTTCTG AAGACCTAAC ATACAGCCCA GTGACCATAG TGAATAACAC TGAATGANCA GTATACTCGA  
 AATTGTCTAA CAGAAGAGAT CTTAAGTGT CTCATAACAC ACAAACATA GCAACTGTAT GAGGTGATGG GTATATTAAAT  
 TAGCCTGACT GTGGTTATAC ATTTTATCAA AATGTCACAC TGTGGCTGAG TNCAGAGGCT CATACCTATA ATCCCCANCA  
 TTTTGGGGA GCT

SEQ ID NO:1023: (Length of Sequence = 379 Nucleotides)

TCAAGTCTCA AAACTTTAAA AGACAGTAGA TATTTGTGGT TTTCTAGCTA AATGAGGGCC AAGATTGGNC TTTTCAACT  
 AAATTGAATC ATGTAGTATA TCTGATTCA TAGCTTTCTG GGGGAAAAGG GAGGATTGA ATTAGCAGCA GTGCAGGTCA  
 GGAGCAGTAA AGAAGACAGT AGGAGGAGTC CAACTACAGA TGTGAATGAN CAGCCTCAGA GGAACACATG AGAAGGTGAC  
 CTGCTGTTTA TCAGGAAGGC GGGGCTTTCT CTCTAAGATA CAAACCAAT AGGAATCGTC AAATAGTTCA AATTATCCGG  
 GGGAAAAGC CTGAGCAATG ATCCCTCTGG AAAACAAAGC AGTTCTCAGG CAGCACCTT

SEQ ID NO:1024: (Length of Sequence = 320 Nucleotides)

AGTCTACAGG AACAAAGAAA TCTAAGATGG CTGCTCAGCC TTGAAATGTA CATGTTTTGC AGCAAAGTTG TTGAAGAACC  
 TTCCGTGGC ACAGATTGTC CTTTTTCACA AGCATACAGA AGCCTCCTTC CGCCAGGNC TCTTCCGTG CATCCTTGCA  
 AATGGCTCCC ATTTGACACA TTCCTAAGTC TAAGAGATA CCACTAGGGC AGCTTGTAACA GTTCTTGAAT CCTGGGCCAT  
 TGCACGTCAA ACAACTGATA TCACATTTT TTGCAGGAT TGTATCCATT CTCTGAAGAG TGGTCAAAGT AATAGCTGAT

SEQ ID NO:1025: (Length of Sequence = 368 Nucleotides)

TATTTAATCA TTCTTTTCTT TGCCGTAAGA CTTAAACTA AGAAGATTAT TCGAATGGTG AATTAACITG TTGAAGAGAC  
 TATTCCAAAG GGATAGAATG AGACTAATTY CTGACTATGT TTTGCTAGTG ATGGGTGGAT GGGAACAAAC ATTACAAGAA  
 ATAGCATAAT GAATGTAGAA AATATTTTCTG TTTGGAGATG TGCATGANIT AGTTTCCTAG GTTTGCCACA ACAAGCATC  
 CCAAAGTGGT GGCTTAAAAA ACAGAAATTT GTTTTCATGGT TCTTGAGCCT AGAAGGTCAA AATCAAGGTG TTGGCAGGAC  
 CATGCTCTCT CTGAAACTCT AAGGGAGAAG CGTTCTTTGT TTCINCT

SEQ ID NO:1026: (Length of Sequence = 379 Nucleotides)

GGTGCAGGTG CATAAGGAA GGACCATGTG GGCTCAGAGC AAGGGGGCGG CCATCTCCTA GCCAAGGAGG GAGGGCTCCA  
 GGGACCCCAA TCCTGCTGGC ACCTAGGCCT TGANCTTCCA GCTCCAGAC TGGGAGAAAA TAACGTCTCA TTGTTAAAGC  
 CCCAGCAA TGANTACAGA ACCTAGGAAG GGGCAATGAA TGANTGATAG GTGGAAGGGC TAAGAAGAAA AGAGGAGGGA  
 GAGGAAAGAG ACGTGCTCAG ATCTGTCTCT NCTGGACATC CGATCCCAGG CTGTCTCTC AGTGGGNCCA AGTCCAACCTA  
 GCAGTCAGCT CAGAAATAAT CCTINAGGCA TCGAAGCTTT CACAAAGGAG GNCACAAA

SEQ ID NO:1027: (Length of Sequence = 411 Nucleotides)

GCCCTTGGCA CCTAGAAGCA GCCAGGAGGG AAGTACTGAC CATTTAAAG TGGCAGATCT CCGGGCCCCA TTTCTGCAGC  
 CTTCACTCTG CAACTCCAGG GAGGGTATTT TTNATTGTG GGTCAAAAA ATCTGTATAT ACAGTCTATG TGTTTAGAAT  
 TTGTGTTGTA AGTAACTAC AGCTTTGAGT TGGAAAGAAG TCACGGGTTG TAAACCAATT TGGATTTTTT TAAACAAAA  
 GTATTAAATA TCTGGAAGAC AGINTTGGCC AGGTCAGGAG TGTTTTCTTG GTGGTTCCAG CCCCCATCA TTGAACGTGT  
 TCTGGGCTCA GTCAGACACA GACATTCATC TGTGCTGAC CAAATCAGGG GCTTTCCAC CTGTGGGGGA GGGCACAGTT  
 AGGATGTTTT T



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SEQ ID NO:1028: (Length of Sequence = 401 Nucleotides)

GATCATCATG CAGCTCAACT TTCGTGTTGA TTCCATGCTA AGCAAGCTAA CCTATCCTG CATTGTTAGC ACTAGGCACC  
 CAGCTGCCAC CTCCTCATCC TGCTGCCCTT AGGCCACATG GGAGCAGTCC ATGCATGACA GCCTCTATCC TACAAGGCCT  
 ATGAGTATGG ATTGGGGGGG CCAAAAGGAA AAAGCTCCAT GTGCCCTCTT GTCTGCGTGG GTCAGAAGAG TTGTGCACGC  
 AGATTAGCAG GCCAAGGTCT GAGCCACAGC AGCATTTTTA TTTTCAGATTT TGATAACTGT TTATATGTGT TGAAACCAAA  
 NTGNCATCTT TTTAAAGCTT ATCCATAAAA AAAAATAGAT GTCTTTTATA GTGGGAAAAC ACATGGGGGA AAAAATCATC  
 TATTTTGATG CAGCATTTGA TAATGNTTAA ACACCTCACA CCTCACTCTT

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GAAAAATGCC AATTGGATGC CCTTAGGTGG AGGTGAGAAA ATGGCATCCT TGCCTTCTTC TCAATATGAA ACATTAACTA  
 GTTGACAAAT TTATCCTTGT AGAAATGAAA ATCTATTTAA TCAGGGACCA GAAATGGCTG AGGAGATAAA TGCATCATT  
 CAAAATCTG CTTTGAATC CTGGACATTA CAAGGGGGTA AATGCAGCAT GACTTTTTGT TAACCACATT CCAAAATGTG  
 GAACATTTCT TTTAGAAATG AAAATATTTT AAGGCTGATG TATTTTAAAG CTACACATTA TCAGGNCAT ACATTGAGAG  
 TTCGCTTAAT TAAAGGTGT TGGGCATCAA ATTATGTTA GTAGGTACT ATTCTTAAC AACTCAAGN TGCTTTAATG  
 G

SEQ ID NO:1030: (Length of Sequence = 340 Nucleotides)

TTCCCGCTTG AITCCAAGAA CCTCTCGAT TTTAATTTIN ATTTTAAAG AGGGAGACGA TGGACTGAGC TGATCCGCAC  
 CATGGAGTCT CGGGCTTAC TGAGAACATT CTGTTTGANC TTGGTCTCG GAGCAGTTTG GGGGCTTGGT GTGGACCTT  
 CCTACAGAT TGACGTCTTA ACAGAGTTAG AACTTGGGGA GTCCACGACC GGAGTGGCTC AGGTCCCGGG GCTGCATAAT  
 GGGACGAAAG CTTTNTCTT TCAAGATACT CCCAGAAGCA TAAAGCATC CACTGCTACA GCTGAACAGT TTTTTCAGAA  
 GCTTGAGAAA TAAACATGA

SEQ ID NO:1031: (Length of Sequence = 452 Nucleotides)

CCAGGGGAAG GNTCCCAAGG GACGGGCTGG CAGCCGGACA CATGGACAAA CTGATGGACC CAGGACTGAT CAGACAAAGC  
 TCTCATTAGC AGAATGTGGG CACCTGCACC CAGGGCCCAT ACCAGTCCC TGAGAGCAA AAAGCTTAAA GTTCTCCCTC  
 CAGGCCCAGG GCCAAGAGCG CCTCACAAAG GGCTGCTGCC TTGAACTTGG CCTGGGGAAA TNAGACCCTG AGCGGACCAC  
 AGCCCTTGAG CCTTGGGAGG AGCAGCCCAT CCAGNAGCAG CACAGCTNCC GAAACTTGAG GAAGAAGACT TCCACCCATA  
 GCACAAGAAC TGCAAATACT GTCTNGENCA GAGCCACCAG AGGCCTTAGG CTCTTAGGA CACCGATATC CCCCATTAT  
 GGGGTGNGGA GGGAGTGGCT TTTTATAGCA AGGGACTTTG TTAGAGAGGT TT

SEQ ID NO:1032: (Length of Sequence = 411 Nucleotides)

GAATCTACAG AAACATAAAT TATACTGAGT TGTGCTGTAC TGGTTTGTGA GAACATCAGT GTATTAAGGA GAATGGTAGT  
 TTAATTTGAA TATTTAAAGA AAGTAATTTG AATGGTTCTA GTACTAGGGC CATTATTAC TAGTAACATA GATTAGTGAC  
 TTCAACTGGG TGCTCTTATT ATCTGATTTG TCTGAAGTGA AAACGTGTA GGTGCTCTTT TAAAATGTAT TTGGAAACAC  
 CATAGTTAGG GTAAATNCAA TGTACAAAT CACTCTTGCA TATTATTTNC TTAGCCAAAT TTATGAATTC TAAGTTAGGC  
 CAAATTGAAG GTTTGGAGTT TTACATTGTG GNGAGTCTA AATTCATGCG TTGGCAAGC ACCAAGENCA TGGGGAAAGA  
 ATCTGGTATT T

SEQ ID NO:1033: (Length of Sequence = 372 Nucleotides)

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AGTGGCTTAC AAAACACAAA TTTATTATCT TACCATTCTG TGAGTCAAAA TTCCAAAATA GGTGTCACTA GGCTAAAATG  
 AAGGACTGCA TTTTNNCTG CAGGCTCCAG GAGAGATCTA TGTCTTACTC TTTCGGCTT CTAAAGGCTG CCCACATTCC  
 TCGACTAGTG GCGTCCCTCC TTCATCTCTA AACCCAGCAA CAACAGGTTG AGTCCTCATG TCACATCTTT NTTACCTTTC  
 TGTCATCTCA TCTCGCTGAC TGCTGCTGGG AAAAATTCTC CACTTTTAAG GGCTATCATG ATTAGACTAT GCCCACTAGA  
 TAATACAAGA TCTCAGATCC CTTAACTTCC ATCACATCTG CAAAAGTCGC TT

SEQ ID NO:1034: (Length of Sequence = 320 Nucleotides)

CGCGCCGCGA CGGAAGCCCT CAACCGGCAA ATCOGCGAGG AGGTGGCGAG TGCACTGAGC AGCTCCTACA GGAATGANIT  
 CAGGGCATGG ACGGACATCA AGCTGTGNA ACCAATAAAG GCCAAGCCCC AGTACAAGCC CCCAGATGAT AAGATGGTTC  
 ATGAGACCAG CTACAGTGCT CAGTTCAAAG GAGAGGCCAG CAAGCCAACA ACAGCTGACA ATAAGGTCAT TGATGCGAGA  
 AGAWTACGCA GCCTCTACAG CGAACCCCTC AAGGAACCCC CAAAGGTGGA AAAACCTAGT KTTTCAGAGTT TCAAACCAAA

SEQ ID NO:1035: (Length of Sequence = 375 Nucleotides)

TTTTTTTTTT TCAGTGGAAA ATAACTTINA TTGAGACCCC ACCAACTGCA AAANCTGTNC CTGGCATTAA GCTCCTTCTN  
 CCTTTGCAAT TCGGTCTTTC TTCAGTGGTC CCATGAATGC TTTCTNCTCC TCCATGGTCT GGAAGCGGCC ATGGCCAAAC  
 TTGGAGGTGG TGTCATGAA CTTAAGGTCA ATCTTCTCCA GAGCCCGCCG CTTCGTCTGC ACCAGCAAGG ACTTGCGGAG  
 GGTGAGCACC CGCTTCTTGG TTCCACCAC ACAGCCTTTC AGCATGACAA AGTCATTGGT CACTTCACCA TAGTGGACAA  
 AGCCACCCAG AGGGTTGATG CTCTGTIMAG ATAGGTCATA GTCAGTGGAG GCATT

SEQ ID NO:1036: (Length of Sequence = 304 Nucleotides)

CTCIATGTCT TCTTCTTTTT GCTTCTCTC AAGTAGAG TGACTTTTTT GAAGGTAGC TTCTTCTAAG AGTTCATGC  
 TATINCTGGC TCTTACAATA GCCTCATATC TCINATTINC TAATTCAATG CACTTTGCTT GTAGCTCTCT GGTCTGTTTT  
 TCCAGATGIG TATTINCGEN TCINAATTGG TTGGCTTCTT GGATTGTAC ACATAATCTT ATTTCTAATT GTTTTATACT  
 AGACTGTAAAC TGCTGTAAAC GGCTATCTGA TGCTTCTCT CTINCATGGG CAGACACCAC ATCC

SEQ ID NO:1037: (Length of Sequence = 341 Nucleotides)

CTATGAGGAC CAGCAATTAG ATTTTATAGC AGTACTTCCC ATTAAAGTGA ATAACCAAAA TCACTTTAAG GTCAAGATCT  
 TAGTCAATAC ATTATGTAAA ANCATATACA ACAGACAATA CACCAGAAAC TAAATCTTTT GCAACCTTTT AAACCTATGA  
 TGAAAAACAT TAATGTCAGC TCTAAAATGT ATTAAGCAGT TTTTACAAAA AAAATGTATA GAATACAGGA GCCAAAAACAT  
 TTANCAATTA CCTAACTTG CTGACACAGA NTACTATTAA TAAATAATAC TGATCANNNG AAAGTAATCA ATTTGAAAGT  
 GGTGGGGGTA GAAGGACAAC A

SEQ ID NO:1038: (Length of Sequence = 281 Nucleotides)

GGAGGCTGAG GTGAGAGGNT CCCTTGGGCC CAGGAAGTCA AGGTTCAGC AAACAGTGAT TGCACCACTA CACTCCAGCC  
 TGGGCAACAC AGCAAGATCC TGTCTCAAAA AAAAAAAAAA ATATCAGTAT TGTTTTATTA ATTGTAACAA ACACACTAAA  
 TAAATGTAAG ATGCCAACAC TAGGGGAAT AGGATNIGEN GTAAATGGGA ACTCTCTGNA TCATTTTTC AACTTTCTG  
 TACATCTTAA ACTATTTTAA ATGNTTCTAC AAAAGTTAAC A

SEQ ID NO:1039: (Length of Sequence = 246 Nucleotides)

CCAATGATGG CAAACATGAG GATGGCAAAG AAGAGAAGCA GCCCAATCTG CAGGAGTGGG ACCATGGCCT TCATGATGGA  
 CTTGAGCACC ACCTGCAAAC CTGGGGCCAG AACAGGGCAG GTCAGGAAGC AACGTGGGCA GGGTAGGGCA AGGAATTTNG

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TGGGGGCAGG GACAGANCAG CAGGAACCTA GCAGGGACAG CAAGGTGCTA AGCAGTINAGT GCTTTCAAGG GCAAAGGTTA  
GAGCTG

SEQ ID NO:1040: (Length of Sequence = 399 Nucleotides)

GAGGTCAAGA AGAGCTTAAG AAAATATAGG AGATACTACA GCATGTTTGG TTCATGACCG GAATGATTTA GTAAGAAGGA  
AAAGCCAATA ATGTAAGAAA GCGGATTGCA GGAGCAAAGA CTTTAAGGAA TAAAAAGGNC AAAATTGTTT GTTTCTCAGG  
GAAGTAATGA CAGGGGCTGA GCAGGAGCCA GGAAACCCAG CTTTATAGCTT CAGNTCTGCC TGACATTAT TGGTCATGTG  
GCTCTGGGTG TATTCTCACT TCTCTCCCT AAATAGCAAG AAGGAAAAGC CTCCTGGAGC CTCGTGTCTC TGCTTCTTTC  
TGTAATATGG TTAATGTTCT GATCCGCTTA GCTGGTTAAT TATAGAATCA CCCINGCTGG GGTCTTTTGG GGAAGTGGCC

SEQ ID NO:1041: (Length of Sequence = 324 Nucleotides)

CCATAAACAG TCCGTCAGTG ACAAATGTTG TTACGCAGCA CATTTTATGC AGTGTGTGAC CATAACGAT ACACAGAGGA  
AATTCAGGGC TTCTAGGAAA CCTCTAAGG CCTCATCTCC CTAAGGGCAC CTGATGAGCC ATTCTCACC CCTGCACTGC  
ACCAGNCTC CAACACCACC ACCAAGGCTA ACCGCTGTGC ACTCTGGGCC CTGGGTCTGC AGTACCTGGC TCCCAAGCAC  
ACCAGCATCT GAAAACTTGN CATCCTTGCC GAINTTNCGG GGAGTATTGG TTGATTGCAG TGACAAATCG GCAGAAGTTC  
CGGG

SEQ ID NO:1042: (Length of Sequence = 212 Nucleotides)

ATCTGTTTCT CAGAGATGAC ACTGCCAACA ATCACAGATT TGCATACAAT ACAGTTATGT ATTGGCTATT CACAATTTAC  
AGTAGTGTTC TTCCCTCTGA AAAATATAAG TNCAAAAGCT AAGTAAACAA TGNGGTACTG CCATTGCGGN TTTTITACAT  
GGNCTTAGCT TAAAGAACTG GTCCTTAGCA AATATTCAAC AGNCAACCT GA

SEQ ID NO:1043: (Length of Sequence = 329 Nucleotides)

ACTTGGAGAA AGAAAAATTA GAGAATTCCA GATCCTTAGA ATGCAGATCA GATCCAGAAT CTCCTATCAA AAAACAAGT  
TTATCTCCTA CTCTAAACT TGGATACTCA TATAGTAGAG ATCTAGACCT TGCTAAGAAA AAACATGCTT CCTGAGGCA  
GACGGAGCTA TTCCAGATGC TGATAGANCC ACTTTAAATC ATGCAGATCA TTTTCATCAA ANTAGINCAG CAGCAAGATG  
AAGAGCGACG TCGGCAGCTG AGAGAGAGAG CTCGTCAGCT AATAGCAGAN GCTCGATCTG GAGTNAAGAT NTCAGAACTT  
CCCAGCTAT

SEQ ID NO:1044: (Length of Sequence = 285 Nucleotides)

GTTGAAGCTG TTTTATTTT ACACCCTTCT GTTTTAAAC ATAGGGACTG ACAGGGAGAC CCAGGGCTGC AATCTGGGTG  
GTGCTACATT TGTAGACAAG GACAACCTGC TGTATTTTAA CCCAGAAACA TTAGAAAGTT TGTCCCTGAA CTCTGGCTC  
AGATTAGAT GCATCTTTGA AGTGCTGATA TTTGGCTTAT CTGAAGCTTT GGGATTATCA TTINCTAGTT ATGAAGGGAA  
TGAAAGTGTT CATAACATTT TTGCAGGTGG AAGGTAAAGT TGTG

SEQ ID NO:1045: (Length of Sequence = 317 Nucleotides)

TGGTACTG TAGTATTGTA GTATAGTTT AAGTCAGCTA GGTGATGCC TCCAGCTTG TNCITTTTGC TCAGGATTGT  
CTTGGCTATA CAAGGTCTTC TTTGATCCCA TATGAAATTT AAAGTAGTTT TTINCTAATC TGTGAAGAAT GTCAATGGTA  
GTTTCATGGG TATAGTATTG AATCTATAAA TNAITTTGGG CAGTACGNC ATTTTCATGA TATTGATTCT NCCTATCCAT  
GATGATGGAA TCTTTTCCCA TTTGTTTGGG NCTTCTCTTA TTTCTTGGAG CAGTGGGTTT GTAGTTCTTG GACAAGA

SEQ ID NO:1046: (Length of Sequence = 316 Nucleotides)

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CCAGGTGCAA TCTGGGCTCA CTGCGACCTC TGCCTCCGCG TAGTGGGACT CCAGCTGTGC ACCACCCAGT CAGCCCCACG  
CCCACCCTGC CAGGCGTGTG CACGGTTCAG CGTCACTTTA CAGATGAGGA AACTNAGTCT TTGGGAAGCT GACAAGGTGC  
CTGACACAGG CCAGGGCAGG GNCCACCTC ATGGGCTGTG CTGCAGCCTC TGCCTCGTGG GTCACGGCAC CCCATCTACG  
AGGNGCCCCCT CAAGGATGCG CCGTCGAGTN CCCGGGGCCC TTGGCATGTN CCTGGCAGAG AAGGCAGCTC AGGGGT

SEQ ID NO:1047: (Length of Sequence = 261 Nucleotides)

CTTCCTCAAA CTCGGGTTC AGCTGGGTCT CAAACTCAGG CTCCAACCTGG GTCTCAAACCT CGGGCTCCAC CTTGGTCCCA  
AACTCGGGCT CCACCTCGGT CCCAAACTCT GTCACCACCT CTCTNTAGGT CTCANTCTCC GACTCCTCCC AGCCAGCGGT  
GGTGGCGGT ATNAGGCCCC AGGGCTCTAT GGTAGTGCTC AGGGTGTGTG GCAGGGGCAG GGGGCAGCGT GGGAGGCACA  
GTGTGNGGGG CCTAGGGTGG T

SEQ ID NO:1048: (Length of Sequence = 390 Nucleotides)

GAGAACAAAG AGAATGGAGG CCACATACAA TGGAGTAACA GAAGCTTTGC CTGTAGCTCA AGAACCAAGC CGAGAATCCA  
CACTCCTGA TTCACAGTTC AGTATTTTCG GCCACTTTAC TCAAATATTT TTATAAATTA TTTTAAATC GGCAAAATAT  
TTAAATTTCA TCCATTAAAT TTAAATTTCT AGATGCCCTA GTGGCATCCA GAACACATAT TINGGGGAAA ATATTCTAAT  
TTTTTTAAAC AGAAAAAGCT AGGNNCAGAT GATGCATTAA AAAAGTAGAA CACAGAGCTC TTAATTTAGG AATGATCAAA  
ATAGGGTTGA TTCAACTATT ACCTTCTCCT AGGGATTATG GATCAACCCC TAGCAGCAGN CAAAGTCACA

SEQ ID NO:1049: (Length of Sequence = 335 Nucleotides)

AAACTCACAA GTAAAATAAT GCATATTTAA GGGAAATATT ATACAGACTT TTTACACAG AAGTACATAA TANGATTTTT  
TAAATCTAT TGCCATTCAT TTATTTTTCG AAAAAACGT ATAAATATGT CACCAGCTTT NCTTAACTTA AAAAACTTAA  
ATAAAGACA CCAGATGAAA ACTACCTTT GCTGCCATTT TTTTAAAGT TTTTGTAG GGGTTTTTTA TTTTGGNGT  
TTTTTNCIT TTNCTGCTTA GAATGGGTT TCTAGGGAAG AAAAGCCCT GCATTAAAA CAGNCCATTT AAAAAA  
TTCAAAGTTC TGGAT

SEQ ID NO:1050: (Length of Sequence = 265 Nucleotides)

AAAGGGAGGG AGGGAGGGAT GTGAAAATA TGCAAGATAA ATTAAATNCT TAGTTAAAA AAAAAAAG TTTCACCAAC  
TGINTCCAT TACTGAGAAG CCCCACT GCCCCA CTGT GCATATTCCT AGTATTCAT CCATGTCCTG CTCTGCTGTG  
CTGCCCTACA AAAANCCCT CCCGGGGGGG AAAAAAANC AAAAAANCGG TGTAGTGTA ACTGCTGAAG AACTTAAATG  
TTCAAGNGCA TCTTTAAAGT CTAGG

SEQ ID NO:1051: (Length of Sequence = 298 Nucleotides)

ATTTCTAAAA TGCTCTCAAA TACTAATATT ATACATTCTC CCATTTATCC TCAAAAACC CATGAGACTG GTGATGTAAT  
TNCTGTGTC ATTTACAGC TGTGGCAGTC AGTCTAAAGA CCAAGTGATT TGCTCAAAGT CATGGAACAC TTAAATGGCA  
GAGCTAAGGC TTAAACCCAG AATTAAAAA TTTTNTNAG CTCTINGTT TTNCCATTAT ACCAGTTGG CCCTCATTT  
TATTCATGGG TTAAATTAAA TTATGGTAAC AAAGGGCCCC TGGTCACTTT GGACATTT

SEQ ID NO:1052: (Length of Sequence = 359 Nucleotides)

AAGGCAACG TGGTACATCA TGACCCATG GGAATGACTC ATGCCAGCCA TAAAAAGAT GAGAATTCG TCCAGAATTG  
GTCTCTCCG GTGGGTCTT GGTCTCGCTG ACTTCAAAA TGAAAGCCAT GAACCTCGT GGTGAGTGT AACAGTTCCT  
TCAAAGATGG TGTGTCCGA GTTNTTCCC TTNCAGAAATG TTCAAATGT TATCCCAAGT TTCTTCCCT CTGGTGGGT

CGTGGTCTTG CCTGATINTC AGGAGTGGGA GCCGCAGAAC CTTTGCCTGT GAAGTGTTAA CAGNNTCTTT AAAAGGTGGG  
TGGCATCTGG GAGTTTGTTC CATTTCTCC CCAAGTGGGG

SEQ ID NO:1053: (Length of Sequence = 195 Nucleotides)

GTTGCAAATT TGTATTCCCA GTGTTGGCAG GTGGGGTCCC AATGGGAGCT ATTTAGGTCA TGNAAGGTGG ATCCCTCATG  
AAATAGATTA ATGGCCCTCC CTTCCAGGGT AAGTGNAAAT NCTCACNCTG TTAAGTTCCC ACTGCAAGAA GTTGGTTGAC  
CAAAAAGAAG CCNCGTGCCT CCCCCTAACC CTTGA

SEQ ID NO:1054: (Length of Sequence = 319 Nucleotides)

ACAAAACCAG ATGTTCTCAC AAGAGCCCCT GCTTGCAGAT CACTTACATA GTTTTTGGGG AAGCCAAGAT CGAAGATTTA  
TCCCAGCAAG TCACAACCTAG CAGCTGCTGC AGAAATTCAA AGTTCAAGGT GCAAGCTGTC TCAAACATTG CAAGCAAAAC  
ACACAGTACT TCCAACGTGT ACAAGAGGAG GAGTGCAAGA GGAAGAGGTT CGCTGAAACA GGTGTTAGTA AGTTNAAGGT  
ACATAGANIT GTTTCATGTT CACAAGCAAA TGTTGTOGAG GGNCAAAGGN CAGTCCGAG CCTGTAAAGT AACACAGT

SEQ ID NO:1055: (Length of Sequence = 205 Nucleotides)

AACTCAAATA GGAGCTAAAA AAAAAAAAAA GAATCAATGA AACAAAAAAT TAATTTTTTG AAAAATAAA ATTGATAGCA  
CTAGCTAGAC TAACCAGCAA AAAAAGNTAG CAAGTACCTA AATGAAAANC TGNAATGNA AAAAGGAGGA CATTTACAAA  
TNAACACAGG AAATACAAAA GTTCCATGCA GCGAACTTAT TCACG

SEQ ID NO:1056: (Length of Sequence = 165 Nucleotides)

TGCAAATTAA TGATTTCTGC TTCACCAGAT TGGTAGAATG TATAAGATGG TGCATGGGGA AGCATTTAAT ACCCAACAAT  
ATCTGATTAC ATTGAAATCA CAATGGCCTC CCTATCAAAT VAGTAGCGTT ACTGTTTGGAG CCTGVAAAC TTTGAAAATA  
ACTTG

SEQ ID NO:1057: (Length of Sequence = 203 Nucleotides)

CTTTCATTCA AAACCCATCA CAGAAATGGA CAGCTTGGGT CTGTACAAA GCATTCATGT TTTAGAGCAT AGGTCACTAA  
TTGTATATGA GAGCATACAC TGGCTACATA CAAATTAACT GTTCAGNNCC ACAACTTTTN CAATGTTTAA AACAGGATNA  
AGCCTTCCCT GTGAAAAGCA GCACCTTTGT GAACGGTTCT TTG

SEQ ID NO:1058: (Length of Sequence = 201 Nucleotides)

AGTGCAATAT GCACATTACT AAGCACAAA AACAAAGTGA ATTCAAGAACT ACTTGCATTT TTTTATGTTA AATGCCAATG  
AATTATTATG CCTTAGTTTT ATGAACCTGN CINTCCTTG TGCAATTCCT TCCTTGCAA TGAATTGACT TNAACGCGT  
NAGTGAATAG CCTCAGNCTG TAGGATGTCC TTTCAAATTT T

SEQ ID NO:1059: (Length of Sequence = 176 Nucleotides)

CCACACTGGC TACATACATG TTTTCCAAAT TAAGTTTTCT GATGGCTCAT CATTTGCCAT CTCTTCAAAT CCAGGTCCCT  
TTAAAAATCT ATGACCTTGG AATGAATGTG CCAGAATACC TGTATCCTGG AAGTCCATGC GAATNTTGGC NTCGACTGCC  
ATCCGCCATC TGCTGG

SEQ ID NO:1060: (Length of Sequence = 277 Nucleotides)

GTCAGAAGCA GTTGTACAGT ATTACAGTCA GCCACAGAAG CTGTGTTGGG GGACAAGACC CAATCCTTCC CCACACCAGG  
CAAAGCAGTA TTGGACATGA GTTGGCATGT GGCTGGGCCC ACGTCTTAT CCCCCAGGNC CTGNGGGGAG ACCACCTTTC

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TGAATGGTTA ACCAACCCTT AGGCTACCAC TCTGTATTTT ATCAGGGGTA GGGGTATTAA ACCCCACATG CAAGTAAGGA  
ACCCTTGCCC CCAGTGTGCA AATGGGATGG GGATGCT

SEQ ID NO:1061: (Length of Sequence = 206 Nucleotides)

AGAAAGTAAG ATTCTCAGG CAACAGTGTA CAGCAGAGTG GTTCTCCAC AGACAGAGGA GGGCAGAGTG GCCCAGAGTA  
TCAGCGTACA GCAAAGTGGG TGTTCCCATC CACAGGGGCA GCGTATCTC ATAGGANAGA ACAACCCTA GGAAGGCAAG  
CGTCAGNCAG NCAGCAGTGN AACAGTCAAC AGTTAGCCAG TGTCAG

SEQ ID NO:1062: (Length of Sequence = 316 Nucleotides)

TINCCCTCAC AGAGTTTTAG TTAGAATCAC TTTCTCTATT TCCACAAATC CTCTTTTTCT TTCCTTTTAT TTTCTAAAGT  
GAATGTCCAA GCAAAAAGGA AGCAAAATG GTCAAAGATC TCTCTTACAA TATAGTAATA AATTTATNCA AACAACTTGG  
AATTCACCCT GTGCATTGAA AATNCAACTC CACACTGCAA ATTATGGCAT TTTTCCNC TCAAAGGAAT TAGTGAAGTC  
CATTGATGC ATTCATACTN CTGTTTAGEN AATAAGGGAA ACCGCTTGT AAAAGTNCAT CATGGCCTAG GAGTTA

SEQ ID NO:1063: (Length of Sequence = 314 Nucleotides)

ATGATCTGGT TTATGCTTCA GAAGAAGCAT AGTAGCTTCT ACAGAAAATA AATGATAGAA GGCAAAAGAG AAACATGGCG  
AGTATTCCAC TCCAGTGTCT AGTCAAGAGA TTACAAGGCG CTTGGCATGA GGACAACAGT AGAAATNGTT AAAAGTGTAC  
TGGATTGCAA AATATTACTT TGGGGCCAGG GCGCCGNGG AACACGCT ATTAATACCC AGCACTTINT GGAGGTGCAG  
GGAGTTNCGA GTACCACTCC TGGGCCAACA CGCNTGGAAA TCCTGTGTA AAATATAAAA ATTAGCCGGG CCGT

SEQ ID NO:1064: (Length of Sequence = 322 Nucleotides)

GAAAGCATTT GAACAAAGT TGTAAAAATG GCAGATAATA ATTAACACTT GGTAGCAAGA AACGCTTTCT GAAATACTGG  
GAACACTGAC TTGTTTCACT GTAACCTATC ACCTAGTGCT GTATCTGCCA TAGTGCTCAC AATTGCAACT TTATATCCAA  
CATGGGTGTT CCATTCTAT TTGGATAAAA TTTACTGGAA ATATACTAGC AANGAAAAAC TGGTCTTAAA ATGGCAAAAG  
GCTCTGGCAC TAAATCACT GCTACTTAAC TTAGTTTACT AATTAACCTC CTTAATTATA GTTTTCCAAA TCCGCATGCA  
CG

SEQ ID NO:1065: (Length of Sequence = 297 Nucleotides)

CCCTGCAAC TCCTTGATG GACTGATGCT GGAAACTGGG TCAGGGAGCT CCAGGAGGAA CCAGACAGGN TCCTGTAGC  
AGGCTCACC CAAGTTCTAA AGGGCACCAG CCTTGAGAAG GGCAGTTGGG ATGTGGCCAA ATGTGAAGCC AGGTTTCTG  
GGATCTGAC TGTCCAGGT TACAAGTCC TGGCCACTCT GTGAACCTTG GCAAGTTAA CTTCACACT CTTTACAAGT  
TCCCTAATCT ATNAGGAAAC ANTTAGTAC ATGACCTTCA TGGGAATTTA TTTATGA

SEQ ID NO:1066: (Length of Sequence = 267 Nucleotides)

ACAATGGGAC TGTCAAGCA GCCAGCTCCT CCTGACTGC TCCACAGGAA GAGCCATCAA CAAAGCCAAT CCCTGGAGAT  
AGGCTCTGAA ACCAGGATAG AGACTCCTTC AATGGCTGCT GNTGGTTCCA CCATGTATCA TCCAGAGNAA TCACCTGNG  
TGGGCATAGG TGGGCCTGGG AATCTAGGCG ACAGCAATTC CACACATCTT CACCTAGAAA CCCTCCTTCT GGGTGGGCCT  
GCATGGTTTC ATGCTGTAA ATCCAG

SEQ ID NO:1067: (Length of Sequence = 220 Nucleotides)

AAAAATGCAAT TGGTTTGTTA CTGAGTACTA TTCGTGGGAA GACAGCATCC TGNACTCCCT CTCTACAGAA TATTGGGAGT  
AAAAATGAAT GTCATCCCCG GTGGGAAATA TTATTGGGGG TTGAAGCAC AGAGCACAGG AAAAATTAAG TNCAGGAAAC

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AGACACTAAG AGTGCACTGG GCAGGTCTGA CTGCAGGTGA TGCAACTTGC CAGCCGTGGT

SEQ ID NO:1068: (Length of Sequence = 412 Nucleotides)

TGGCCAGCAT CTGGGAACCT TGGGTGTGTG GACCAACTTC TTCCAACACG TGCGCACTGA TGGCCGGGGC CCCAGCCAGG  
CCTGNCCTGA AGGGTCTTCC CCGNCCOGAG GGACTGTAGG GGGTCTCTAG GAAGCATCAC ATCAAGGTCC TCAGGTTAGA  
TNCAGENCAG CCCATTGACC CATTTNAGGG GACAGCTGGA GGAAGCCCG GAGTCCCTTG TTTCTTCAGC TGAG

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TCGCTCATGA AGATAATTTA ATGCTAGACT GATTCTGCA GAGTAAAATC TGGCATGTNC TTCAGGAAGT TTTCTTTGTC  
GCTGCATATG AACATTAGG TCTCCTCCAT TTACATACTC TATAACAAAG AACAACTCTG TTTCTGTCTG AAAGCAAGAA  
TGCGCCTTAA CAAGGAAAGG ATGATTGGAT GCCTGCTCAA ACACATGCTT CTCTGTCTGT ACCCAATCAA TATCCTCATC  
ATCATTAACA AGCTCTTTT TCACAACCTT CATTCGATAA ATACGATCTG TTTTTTTTAA TCGAACCAAC AGTACTTTGG  
CATAACTTCC TCTTCTATT ACCCGGAGCA AATCAAAATC CTGAAGACCT AGACTGGATG AAGCTTTGCA CTTTCCCTGG  
NGTCATTGCC TC

SEQ ID NO:1070: (Length of Sequence = 358 Nucleotides)

GTGATTGTNC CACTGCCTC CAGGTTGGGT AATGCAGCGA GACTGCGTCT CAAAAATAA ATAAATATAA AAAAAAAAAA  
AAAAAAAAAA AAAAAAAAAAG CACCACCGCA CTCCAGCCTG GGCAATAGAG TGAGAACCTG TTTTCCAAA AGAAAAATNT  
TAAAGANTG ATCTNGGCCA GGCGTGAGG CTCATGCTTG NAATCCCAGC ACTTTGGGNG GCCAAGAACA GGTGGTTTAC  
TTGAGGNCAG GAGTTCGAGA CCAGCCTGGC CAACATAGCA AAACCCCAT CTNTACTAAA ATTACAAAAA GTTAACCTGG  
CATGGTGGTA CATGCCCTNG TAATCCAGT TACTTCCG

SEQ ID NO:1071: (Length of Sequence = 411 Nucleotides)

CTATTTATGA ATTCTCGCAT TGGTTTCGAA AACTCAACAC AGTTAAATGA ACAGGAATTG AAGGTGCATG ATGGATGCGT  
CCCTCATAGC ATTTAAATCT CTTCCACTTG ATTAAAAATT CCTAGTTCCT CTTCACTGAA TTGTTTAGAG TTTTNNAGCA  
GCCTCTGCCC TGATTAAAC AAATTAGCAT CAAAGATCCC CTGTGAATG AGAAATCATT AATTGAGAAA CATGCAATGC  
TCTTAATTA CTTTTAGAAC AGTGAGAGAA CAAATAATCT CAGGTTCCAG AGGGCCCTGC CTGCTCTGCA CCGTGAACCTC  
ATTTGCTGTA GCTGCTGGAA TAAACTCAA GTAGGCAAAC ACTATTTGGG GAATATCAAT GCAAGCTTTC AGTAAACACA  
CTGTAGGATT G

SEQ ID NO:1072: (Length of Sequence = 342 Nucleotides)

TCCCATTTTT ATAATTATTG GAACATGAAA CTGTATTTCT ATGAACCTCA TGATTTTTTT CCATAAAATT ATATGCTAAG  
AGAGTCACCA CAAACTATG AATTCTCTCC CGAATTATTT TTGCTTCTTT GGAGCACCAT AGTCTTTGTT CAAATCACAA  
CATGAACTG TTGCTGCAAT GCTAAAGATG TGAATCCACC ACTATCAATA CGGTCCAGGT AAAACCTGGA GCCACATGTT  
ATTCAAGTTA TTTTGTAT CTAATGATTG ACATGAAAAT AAAATAGTAA GCCAATATTA AATTTGTAGG CATAGTTGCC  
CCACCTNAAA AGTGTTTACA AA

SEQ ID NO:1073: (Length of Sequence = 217 Nucleotides)

GTTTTCGTG CTGGCTAGGA TAATGCAAGC NCTTTTCAGA TGANTCAGAA TCGAAGAAAA TACGCTGGTA AAACAGGACC  
TGATTTACCA GGNACTAAAC AATTACACTC CCATTTCCAT TGCTTTCAAT ATTTTCACAC GNTACACGAA CCTTTAAGAT  
GGAAAGGGAA AGCGATTTTT TTTTCAACAA GTGGGCCACC AGATGAACCA AATTAGA

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SEQ ID NO:1074: (Length of Sequence = 379 Nucleotides)

GGTTAAATTT TCATCGGAAT GTATAAGCTT ATTTATTAGT GTATTTAATG GTTCATCAAT TGATAAAACA GGTGTAGCAA  
ATACATGCCT TCCTTTTGGG GGATGGGCCT GGTTAATCTC CAAATTGGCC GTTTGGAACA ACTCATCAAT ACTGTACAAA  
GAAGGTACCA CTGGTGGGA ACTTTCACCT TTTAACAAAA CTGGTTCATA TTTCTCACTT GCATAGGAAA TGGTCAAACC  
TTGAAGTGAA GCAGAGTGCA TATGAGAAGT AGGCGACACA TCAAAAACCTG GTACAGATGT AGAGTGCAGC ATGTTTTCAC  
TTGAAGCAGA ATTTGATACA ATGAGGATGC AACCATTGTA GANCTAAATT TATCAACTT

SEQ ID NO:1075: (Length of Sequence = 345 Nucleotides)

ATTAAGTTGA CAGTCCAATC AGAAATATTT AAACAAAGTT TCACTACTTA AACACCATCT AAATATACTT TTTGTTATAT  
TCCCAGCAGA AATTGATGGC AAGGAATCAT ATATCCCATC AAAACCGTAT TTTTCCCCCT AAAAGGCAGT TTAGATGTNC  
TCATTCTAGG NTTTCCATCT CTCTCTCCA CCATTCCAAT TCCCAGAGTA CCTCTACAAA TATCCCTGCT TACCAGTAGA  
NCTATTGCT TTAACAATCT TTTCTGGGT AAGGAGATGC ATATGCCAAT GTGAAACTA TGGAGGGGA CTCCTGCCTT  
CAAAGGCTGA CTAGAAACCA TTGGA

SEQ ID NO:1076: (Length of Sequence = 286 Nucleotides)

TTTTTTTGA GATGGAGTCT CGCTCTGNG CCCAGTGTGG AGTGCACTGG CATGATCTCG GCTCACTGCA AGCNCGCCCT  
CCTGGGTTC TGCATTTTC CTGCTCACC CTCCGAGTA GCTTGGACTA CAGGCGCCTG CNACCACGCC CAGCTAATTT  
NTTNTGTGTG TGTTTTTGGC AGAGACAGGG TTTCAACATG TTGGCCAGAA TGGTCTCTAT CTCCTGACCT CGTGATCCAC  
CCGCTTGGC CTCCCAAGGT GGTGGGATTA CAGGCGTAA TACCG

SEQ ID NO:1077: (Length of Sequence = 366 Nucleotides)

TCACATAGGT CACATTTTAC CCATGAAACC TTTCTAAATT ACCTTTTGCA TTNTTGCCT ATCCTTCTAC ATCATCATAC  
TTGCTCAATT AAAGTCACCT TTTTGGGTAA CATTTCAGAA ATTGGGATTC CTCTTACAAT TGCTATCAGA CAGAAGCCAA  
TTATGATGTT GTCATTGCTT ACACATGGN AAATAACAAA ACTGCCAGCA TGACATTTGC ATATGACAGT CAACAGCCTG  
AAAGAAATTC CCAGAAATGA TACTGGAGCA TTCAATTCAC CCTCTAGGAN CCAAATGGAC TNGGAAGGAA GTAGAAGATG  
GGGAATCCCT AAGCAGCAGT CAAAGTAGGC TGGCTTTTCA TAATTT

SEQ ID NO:1078: (Length of Sequence = 380 Nucleotides)

GTTTAAGTGC GAAGATTTTA TTAGGCGGTA CAATTCCAAG GTGGTAAGGG TGAAAGGAAA GGCGAAGGCA GGCAAATACA  
TTATTGAGCT GAAAACAACT TTACATTCAA GGACAGCTTC CAGACAAGCC ATGTAGAACC AGCATGCCTT GGGACTGINT  
GGATGGCAGG GAGACGAGTT TCTATGCTGA CCACATCATG CTTTCTSCCC CCTTTGGGGA AAGTATGCCT CACGGACCTC  
TAACCTCTCC ACTTCTCTGG GGGCAGCACC TGACCCCTCC CGGCAACTNC TAGGCAAGAG CATTCTGTTC CTTCAAATTT  
YTCACCTGAG TCTGAGTCAG AGCATYCCAT CATCAGAGCC TCTGTCAAGG AGGCAGTGCT

SEQ ID NO:1079: (Length of Sequence = 439 Nucleotides)

CTTAAGTTAC TGAAATTGAA ACACCCTTTG TCCTTCTCGG CGGGGGCTTC CTGGTCTGIN CTTTACTTGG CTTTTTTCCT  
TCCCGTCTTA GCCTCACCCC CTTGTCAACC AGATTGAGTT GCTATAGCTT GATGCAGGGA CCCAGTGAAG TTTCTCCGTT  
AAAGATTGGG AGTCGTCGAA ATGTTTAGAT TCTTTTAGGA AAGGAATTAT TTTCCCCCT TTTACAGGGT AGTAACCTCT  
CCACAGAAGT GCCAATATGG CAAAATTACA CAAGAAAACA GTATTGCAAT GNCACCATTA CATAAGGAAC ATTGAACGT  
TAGAGGAGTG CTCTTCCAAA CAAAACAAA ATGTCTCTAG GTTTAGTCAG AGCTTTCACA AGGTAATAAC CTTTCTGTAT  
TNAAATCAGG GTAACCCCTT TCTGTATTG AGTGCACTG



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SEQ ID NO:1080: (Length of Sequence = 419 Nucleotides)

CTGAAGTCCC TGAAATAGG AAGTCTCAAT TAAAAATCA ATTTGTCATA GTCCACATAA AGATAATCAA TACATTTTGC  
TCTCAGTCCT TGGGATGGTT TTTGTAAATA ATATTATCTT GACAAAAACA AACAGGAAGA TCCCACCCCC AACACATACC  
ACATTCCAAT GTTACCTGGN ATTAAATAT ATACCAACAT GCATCTTTAG GTTACTCTGG TCCATGGTTT CCTCCAGTGG  
CAATGGAATT TACAAAAATG TAAGACGTAA TAGATATATA ATTATCTTTT TNCCTAAATG AAAGTAGCCT TAAAACTGG  
TACATAATGG TTCCTGGGTT CANIGATCAA AATTATGGAN GTACACTTAA CCTATCTTCC ATTGAGTGGC TTAAATGGG  
ACCTTAAACT GTGGACTCC

SEQ ID NO:1081: (Length of Sequence = 411 Nucleotides)

CAGCGTTTAA ACCAAGGCG CACTAAACCT CGTAAGCGCA TGANCAGATT TAAAGAGAAA GAAAGTCTG AGTGTGCCTT  
TAGGGTCTTA CTTCTAGTG ACCCTGTGCA GGAGGGGCGG GATGAGTTT CAGAGCATAG AACTCCTTCA GCAAGCATAC  
TTGAGGAACC ACTGACAGAG CAAATCATG CTGACTGCTT AGATTCAGCT GGGCCACGGT TAAACGTTTG TNATAAATCC  
AGTGCCAGCA TTGGTGACAT GGAAGGAG CCAGGAATTC CCAGTTTGAC ACCACAGGCT GAGCTCCCTG AACCAGCTGT  
GCGGTCAGAG AAGAAACGCC TTAGGAGCC AAGCAAAGTG GCTTTTGAA TATACAGAAG AATATGATCA GATATTTGCT  
CCCTAAGGAA A

SEQ ID NO:1082: (Length of Sequence = 350 Nucleotides)

CTGTGAGGGC ACAAGTGTAG GTATCTTINC AAGTTCCTTA GGTGATTCTA GAATGCAGCA GGGTTGAGAT GCTCTGCCTT  
AGGGGTAGAG AGGTGGGAAC ACTGACAGGT TCTGCAAAAC ATCTCTGAAC AGCTGCTGGT GTCTTTTCT GTACTTCAAG  
TTTACGGCA CATCTGATAG CTGTCGAA AGGGAAGAGA GAATTACGTG GGCTAGGCTG GTTTGAAGGT TTGCNTAAGN  
TTTGGCTTGA GCGACTTAA CACGTTTATT TCAAAGTAAT TTGTGTTGT AGCCCCACTA AAGTAATTTT GGGCCAGNAA  
AGGTTCAAAA TACGGTTTTC CCTACTTAAG

SEQ ID NO:1083: (Length of Sequence = 430 Nucleotides)

GTGAAGTCCA CTGCTTATG GACAGCCCAT TTGCATGGGG CCCTGCGTGT GGTGCAGCCC AGGGTATGTN AGGAAGGCCT  
CANAGGAGCT GCTGCTGCCA CAGGTGGTCA CCAGGGCAGA GGTACACTG ACATACCTCC AGACCAGCCC GCTCCACTGT  
GGACAGGGGC AAGTACATA CTGCTGTTT ACCATGGGGT CACGGCAGAA CCTGTNTCAC GGGGTGCTTT GTGATGCCAA  
ATGGATATAG GTGGGACGTG CTGGCAGCAG CGGCCTCAGC GTGAGCCAT CTCCCCTCCC GTTCTGCTCC GGCCTGCTG  
TGGGCCTAAT GGTGGCACCG TTAAAGCANC TGCTGTGTGC TCAGCCTGGG GGNCTGAGGG TTCCATACA TGATCACTGG  
TTCCTACCCA AGGCCTTAAT TCCTNCCTGT

SEQ ID NO:1084: (Length of Sequence = 369 Nucleotides)

AATGGAAGAA GTGAAAAGA ACAACACAA GAAATAAAG AAGTAACCTC TTTCACCCAC TGAAATAATC TCTGAAAAG  
ATATTAGCAA TCATGCAGCT TATAAATATC TAAAGGGCTA GAATTGAGGA ATTTATAAGA NTAANTTTTT TTTTCAACAC  
ATAAATACA ACATGGGAAA TAAGATGTTT TTTACTAACA GGCAAACT TGAAGGTCC TCTTCAAAGA CTACAGTGGG  
TGAAAGACCA GTTATCCAAA GGAAACGGTT AGTAGAAATA TAAAGTTAGT CCCACACAAA ATTAAATGG TGCTCAATGC  
AGATTATCTA TCATTANACC ATTTTAAAG GCAATTINTT ATTTAAAT

SEQ ID NO:1085: (Length of Sequence = 413 Nucleotides)

ATACCTTNA GCTGGCATAA TTTAAGTTC TAATTATCCC TTAATCATAA GCTGTACGAT TCTATAATTA AAAAGTTAAT  
GCCTTCTTAA TGTCTATNCT AGTAGAAGAA TGATGAGAAA ATAATAGTAT AGATTAGTTT TGGTCTCTAC TCATTTTGCC

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TTCTGATTAT ATTACAACTC CAGCTGGTGA CAAGATGGCT GTGTAAATCT TGAAATCACT GAGCATTCAT TTTAGCTTCT  
 CATTGAAAGG TAGATATTCA GTATGAATTG TAAACTGGCA TTAAGGGAGA AAGTAGGNAT AATCAAACCTT GATCTGAGAA  
 TTACTTGCTG GTGCATTTCC TCAATGCATA GTAATATCCT TATGANGATG CAGATGCAAA AGTGGGTTTT GGAGGTGGAT  
 AAGGAGGGCA GCT

SEQ ID NO:1086: (Length of Sequence = 277 Nucleotides)

TGGATAGCAT GAGGCAAATT GCCAGAAGAG AATTTCTTTC GCATCCTAGT AGAATAAATC CAAATTATCT TTGTGGTACT  
 GAGGATGTCT GGTTTAGCAC AGTGTAAGT TGTAACACTT TAACAGGCTA TTAATTCACA GTCCTAATT CAATGCTTGC  
 CCGGAGTTTT GCTAGAAAAG GATGAGAAGG ATTAAGGTAA AAAAAAAAAA NAAAAAAAAA AAGATAAGGT TAACCAGATA  
 CATCTTAAGA GCTGATTGCT CTTCAATCCC TAACTCG

SEQ ID NO:1087: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT TTTTTTTGAG ACATTGTCTC ACTGGGTCCG CCAGGCTGGA GTGCAGTGGT GCAATCTTGG CTCCTGCAA  
 CCTCTAAATC CCAGGTTCAC GCGATCCTCT CACCTCAGCC TCCGGAGGGC NTGGGATTAC AGGTGTGAGC CACCGCGCCC  
 GGCAGCATT ATTTTTAAAG ATCTGTGATA GTGCATGTTG TGCTAGTTCT TTAATACAGA CTATATGTA TTCCATGTCA  
 GTTTTTAAAG TTTATTTCCC TATTGATGGC ATTTAATTCC AACTTTTAGA TAAAAGGATG TACTGGACAT TTTTATAATT  
 TTTTGGGGG ACCATGTAAG AGTTTTTCTA GGGGAATTC

SEQ ID NO:1088: (Length of Sequence = 209 Nucleotides)

CTGGGACCAG CTGGAACAGA AGTGGTAAAG GATAACTAGC TACCTGCACC GCCAGAGATC AGGNTCAGGG TGAAGCTGGT  
 TTCCAGCAG CGGAAGTGAA GGAAAGTGGT TNGAAAGGAA GAGGAGGAGC AGGAGATGGT AGGTCCCTCG CCTTCTCCC  
 NTNCTACCCT GGAA:NATAA GTGTCAGGTT CATACTTAAC CACCCCTT

SEQ ID NO:1089: (Length of Sequence = 409 Nucleotides)

TTTGTCTCAC AGCTACATCT TCAGAGGTGA GAACCATGCA TGACACAGAG AAGATGCTCA CTGATGGATT TAATGAGTCA  
 AACATTGAAG AATCAATGAG TGCCGAAAT AACAGGATA GGTGGCAGCA TAGCATGCCC TTAAGANCAT GGCTGTGGAT  
 TCAAATCCCA GACCAATCAC TGANTTTCAA GCCACTTTGC CTCTCTGAGC CTCTGTTTTT TCATCTGTCA AGTGGCAATA  
 ACAATAAATG GTACGTGCCT CATAGGGGCA CCTTGAGGAT TAAAAGAGAG GGTTTCAATA AATCAAGTAC TGATTTCAAA  
 ACCTGGCACA TAGTAGGCAC TCAGCACATG GNCCTTATAT ACTTNTGGGC CAGCAGCGGC TGGGGCTCAT CCCTCCCTGG  
 CTGGGTCCA

SEQ ID NO:1090: (Length of Sequence = 337 Nucleotides)

GAACCTINTCC CCATTGGAGA GGATGAGGAT GATGATCTGG ACCAGGAGAC ATTCAGCATA TGTAAGGAGA GGATGAGGCC  
 CGTNAAAAAG GCACTGAAAC AGCTCGACAA ACCTGACAAG GGGCTCAACG TGCAAGANCA GCTGGAACAC ACCCGGAAT  
 GCCTGCTGAA AATCGGAGAC CGGATAGCCG AGTGCCTTAA AGCCTACTCA GATCAGGAGC ACATCAAACCT CTGGAGGAGG  
 AACCTATGGA TTTTGTGTTT CAAGTTTACA GAATTTAATG CTCGAAAACCT GCATAAGTTA TNCAAGATGG CTCATAAGNA  
 AAGGTCTCAA GAAGAAG

SEQ ID NO:1091: (Length of Sequence = 411 Nucleotides)

CCACTACCAC AGGAAATCTC TATACCCCTC TTGGCTTTTC CTTTTAATGT AATTTTCTTA AAAGCTTCAA GATAATTTTT  
 AATCAGGCAT GCTGAAATCT ATCTAACCTA TTAGTCACTA ATTATATTCT TCAAGCCTAT ATATTAATGT TTCTNCTGTT  
 GTAAATTCAT GATCATAAAG TTTTGGACCT GGCCATCAAT ACTAAAGCAC TGATATTTAG TTTTAGGTGA TACTTGGGCA

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TAAATACAAA CACGGGATAT ATTINGTCAT AGAAAAAAT GTGTTACTGC ATTATTTTGC ACTTCTGAAG GACTGCAAAC  
 ATTTTTCAG CACAATAAGC AAATTCTTCT TTCAAAAAGG NATACTTTNG CACATAATGN AGGTTTGGAA AATGACTAGG  
 NCCCTAGGGA G

SEQ ID NO:1092: (Length of Sequence = 349 Nucleotides)

AAAGAAAATG CCTTGGGAAG ACAGATGCAT TTTTNNCCAC TGGTGTGCA ATTGCTCAAA TATTTTNAGG ATGAATATCC  
 TCACCTTGGG GGCAGTTTTT TAAGAGTGAA TTTGAATTAC TGGAGCAGTG AACAAATTATT TAGAGTCTGG TATAAGTGAA  
 GAAAAGAATC ATGACCTGTA AGCTGTCTTG NAGGTACCAG CAAACTGNCT CTAAAATTTA TATGGAAAGG CAAAGGGGTT  
 AGAATAGCCA ACATAATACT GNAGAAGTTG GAAGACTCAC ACTATCCAAT TTCAAGGTTT ACTGTAAAGC TACAGTAACC  
 AAGGCAATGT GGCACCTGGT AAAAAGTAA

SEQ ID NO:1093: (Length of Sequence = 400 Nucleotides)

GGACCTTGTT TTACATTCTG GATTTTCCTT TTTACTTTCC TAATGATGTA ATTTAACTNC TTCCTGTATT TNCCATATTT  
 CCTATAAAT GGTAGTTAGA TCTAAAAGCT TGATTTACTT ATTTTCAGATT TCTAGTCAAG GGIACCTCAAT AGATTGTATT  
 TCCTTTTGCC TCACACGGAG GTGCATAATG TCTGCCTGGC CTGTAGTGAT GCTAAGGTTG ATCATTCTGT TCAGGTGGCA  
 TCAGTCTGTG ATAACCTTCT GTAAGAATCG TTCATTAAAC TTTTCATCTAA TGGNTCCATT CATTTCATGAT CTTTAACTGA  
 ATCCCTGTTA TTTTCATTAGG GAATAGCAAA ATAATGATTT TCTAATCTG TNATTCCTTT CACATTTATT AACTGTAAAT

SEQ ID NO:1094: (Length of Sequence = 414 Nucleotides)

GTCAGTNTC CATAACTGTT TCCTGCTGAC AAAGGGGCAG TGGTGATGGT TCTNIGGGTC TTGGCCTCTT GCTAGCTGTC  
 ACAGCAGGAG GGTGGCTTIN TGGATTGGTG AAGTGGTAT CCAGCCAGGT CCAAGAGAGA CAGGGGCAGG GTTTTNCCAA  
 TGCCAAATAT ACTTCAGCAG TAGAAGCCAC AAGATTACAT TATTAAATTG TCCCAAGAGT CCCCAGTGC AAACCCAGC  
 TGAACGCCAT TTAGTTATAT NCTGGTGGT TTTCTTCTG CAGGAAGTCA AACCAAGGTT TCTTATGTGT GCTTGAGTTG  
 GGGGCCAGAG TGACAACCTG TAGAAAATA TGTATTCCC CAGCTANGAG AACAGAGGGG AGGGGTACAT GATAGTAGGG  
 AGTCAAGTTT ACAA

SEQ ID NO:1095: (Length of Sequence = 387 Nucleotides)

GATCTGGCAA CCAATTATGT AAATAGTCAT ATGAATCCTT CAGAAATGAT AACACAGCTT TNCTGACTGG TGTGAAATAG  
 TTTTCAGGTG CTCATTCTTT ACTTCATTAG CTTATCTTAT ATCATTAGCT TATCCTCCAT TCAGGTATTA CAGATCTTTT  
 TTTCTGATA AATATGGCAG TTTAGGGAAA TAAACTATGG CATAATATGC TAGGCCATTC TTCTAGGCCA CGCTTCTTTG  
 ATGTAACTT TAAACCTTT ATCAGAACCT AAACAACCTT TCAAAAGATC TATACATATT TNNATCCAAT GTTTAAGGCT  
 ATGAGTAATT CATTATGGTC ACTCTTCATT TTNTCACCT GATAATGATC TCGNCAAAAA TGTGAG

SEQ ID NO:1096: (Length of Sequence = 416 Nucleotides)

AACCTAAAGC TTTAGAAATG TTGAGGTAGC TCAGAGCAAA AACCAAAAGG AAAGGTGATA TGTAGATGTC TGGGCACTCA  
 CATCATAGGT TTGGATAGCT AGTTTAGGAG TAAGTGAAAC ATTTTGAAG AGCATTATG TTAACCTTGA CAATAGGATG  
 GGAGATTCTT AACCCCCCTT GTAATATGCA CCGATTGATT CTNAGTTAAA ATACACCACA GTGACAGTGA TATCATCCCT  
 GTACATCCTC GCCAAGTCTT CTGGCAATGT CAGCATCGCC GNCAGCCGCT CTGCCTCCAT CTCCCCATAC TCATTGTTCC  
 CGATGGCATG TCTGATCAGC CGCGTGGCTG CATTTTGGTC AGCCTGTGG AGCCCGCTGG CTTTCTCTG CAGCAGCAGG  
 CTCTGCAATG AGNCCC

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SEQ ID NO:1097: (Length of Sequence = 406 Nucleotides)

CTGACCTCGT GATCCGCCCA CCTCGGCCTC CCGAAATGCT GGGATTACAG GCGTGAACCA CTGCGCCCGG CATGATTGGC  
 ATTTTGGGCT AAATAGTTTC TGTCACAGG ACCGTCTTGT GCACTGCAGG TCTTTTAGCA TCCTGGCCAC TCATAGTGCC  
 CGTGGTTCTC AGTAGAAGCT GTAGAGGATG TTGGGAAATT GGGGTGGGTT GGTACAGTGT CCTGGCATCT GTCTCAGGGT  
 AAGGGCTTNG GAGGCTCAAG TGCAGAGTCG TATCTGGATG CCAGCAACAC CCTGTGAGA AACTTTCTAC TATGGTATGC  
 TCATCATTCT CTGAAGATGT CAGGGCCTGT TTGTTGTTT GCCTGTTTCT CTCACTTTTG CCTTATAATC AGTTCTTCTT  
 TGTGG

SEQ ID NO:1098: (Length of Sequence = 326 Nucleotides)

GGCCCCCGG CCTCGGCCTC CCAAGTGCT GGGATTACAG GCATGAGCCA CCGCGCCCGG CCATGTAACA ACTTTTATAA  
 AGTTATGATG TGATGAGTTT TGGTGTAAATG TTTTCCCTC CTCTACCTAA AACCTTCAT GCCTTCCCAT TGCTCTTAGA  
 AAACACTCCC CAATCTGAAA CATGACCATT TTTCTTTTIN ACACCCAGAT TGCTCCAGAC TTGGTCAGTT GGTGTCCCTC  
 CAAGCTGGTG CTGGTGTCTT TCCGNCATNC CCCTATTAGT TTTTGAGCAC CTGGACCAGT AAGGTGTICA GTCTCACTTT  
 GCACCT

SEQ ID NO:1099: (Length of Sequence = 342 Nucleotides)

GAAAAACAAC AAGTTTCAGC AGTCTAGCCT TTGGATGACC TATTTGAAAA CCACTGAAAG TCGTGGAGGA ATGGGCAAGA  
 ACCACCTCAT GATTCTNCAG GCCATTGCTA ACGAACAGCT CATCTCTACA ACCAGTCCAG AGGTTTTTATT CCCTCTACTC  
 CGAGCAATGA AATAGACCTG AGTTATGCTT CCTTTTCAATTT AATTTCTGCA GATAAATAGT TTCTGAGCA ATGGATGCTA  
 TGCCTGGATA CCAGTCTCCA CTTTGACGC CGGAACGCC TTGGGNCAC AGTTACAGAA AAAATGTAAA CTCAGAGTGA  
 TCCTTGTTGA TATTGCTATA GA

SEQ ID NO:1100: (Length of Sequence = 301 Nucleotides)

ATCGCTTGAG CCCAGGAGTT CGAGACCAGC CTGGGCAATG TGACAAAACC CAATCTCTAC AAAAAATACA AAAGANTTAG  
 TCAGGTATGG TGGCGCATGA CTGCAGTCTC AGCTACTTGG TAGGCTGAGG TAAAAGGNTC ACCTGAGCCC GGAAGTAGA  
 GGCACAGTGA GCCATCATTTG TGTGCCACTG GACTCCAGCA TAGGGAAGGG GACTGAGACC GTCTCAAAA AATTAAATAG  
 AAAGTCTTCT TTTTFTAATA TNCGTCAATT CATGAGAAAA CTGCACTCAC ACATAGTGTG T

SEQ ID NO:1101: (Length of Sequence = 300 Nucleotides)

TTAAGTCAA GGCTAGAAAT GATTAAACTT AGTGAAGAAG ACATGTCAA AGCCGAGAGA GGCCAAAAGC TAGGCCTCTT  
 ATGCCTAACA GTCAGAAATG CAAAAGNAAA ATTATTGAAG GAAATTAAAA GTGAAACAAC CTTATTGCTG ATATGCAGAC  
 AGTTTAAATA TTCTGGATGG AAGATCAAAC CAGCCACATT TCCTTAAGTC AAAGCCTAAT CCAGAACAAA ATCCTAACTC  
 TCTTCAATTC TTACGANGGC TGAGAGAGGT AAGGAAGTTG CAGAAAAGTT TTGAAGTAGC

SEQ ID NO:1102: (Length of Sequence = 174 Nucleotides)

GAGATCGAGA CCATCCTGGC TAACACGGTG AAACCCCTC TCTACTAAAA ATCCAAAAA ATTAGCCGGG CGTTGGGGCT  
 GCGCCTGTIN GTCCAGNTA CTCGGGAGGC TGAGGCGAGGA GAATAGOGTG AACCTGNGN GGCGGGNTTG CAGTGAGCCC  
 GAGATCGGGC CACT

SEQ ID NO:1103: (Length of Sequence = 360 Nucleotides)

ACAAGGTCTT GCTATGTTGC CCAAGCTTGT CTCAAACCTC TGGTCTCAAG CAATCCTTCT GCCCTGGCCC TCCCAAAGTT  
 CTGGGTATTA CAGGTGTGAG CCAGCACTCC TGGCCCATCA CAGTCTTAAA ACCAAAAGTT CTGTGTCCGA GGAAAACCAG

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GAGTGAATTGG TCACTCTATT TATGACTCAT AGCACTTACA GGCTACTTCG GCAGGGACTT NGGGTACCCC TGTTCTTGGA  
TGGCACATCA TTATCAGCAA CAGGAACAGT TTCTCTGAGC CCTGGGCCCT GGAGAATCTC TAGCTTAGCT ATTTTAGACT  
TGGGGTCAAA GAAGAGAGGC TCTTTGCCAA CTCAGCAACA

SEQ ID NO:1104: (Length of Sequence = 400 Nucleotides)

GGAAGCAAGA CAAAAAAGGA CAGAAAAGCT GGTITAGGTC TTCAGTATGT TTATTTGTCC CTCACATAGC GGCTTGATCT  
GTCTGCCTGT GTGTTACAT AGTTAACCAG AAACGCTAGG AGGAAGTTGT ACCAGTGGGA TACCTCCTTA GGTGCCAAAG  
TTTTATTTTG AGAAATAATA TTACTTTCTT CTTCTGAAAT AAAATAATAA TAATANGANT GAAACCCCA AACCACAGTG  
TGAGTCTCAG GTTAGCATTT GAAAACATCT CCAGAGACAT TGTATTCTT CAGGAGGTTT CCCTGACTCC TTAAATGTGG  
CTGATGTTTC ATGGTTAATT TATTTANITT TAATAAGGTA TGAGCAATCG AAGGGGCTGA TCATCTGAGG TTTTGTACCT

SEQ ID NO:1105: (Length of Sequence = 380 Nucleotides)

CCCAGTGCAG AGGGTGACCA AGCCTGGGAA GGCCCCAGGG GTCCAACACC AAAATTAAAG GTTTATTATA CACAAGAGGA  
CGTCTGTGCC CTCANAGTGG CTGGCCACCC TCCCCACTCT GGCCAAGGTC CTGCACAGAG GTTTGTCTC AAGGGTGACC  
CTTCTGGCC GCCACAGCT AGACCTCGG CGGAGAGGCA CGCAGTCCAT GCTGCTGGCA CAAGTCACTT GGCAGCTNC  
TCAGCCACCG NTTTGGCATC TTGTCTTNA GGTAGGCGCC TTNTTGCCA TTCAGACTTG AGTTCCAGCC ACTCATAGAA  
TGGGACGTCC ACTATCAGGA AGNCTGCAGC CACTTATGTG TCGCGGGCC AGAACAAAGG

SEQ ID NO:1106: (Length of Sequence = 334 Nucleotides)

TGTATCINTT TGANTTCTAA ACCCTGCTT TCCCCTGTC AAATTGTTTT GGCTAGAGAG CAGGCTATTA AGACATTCTA  
GCCAAGCCAA TTTCTTGAGA GTNCTGCAGG TACCAGGTGT TGCTGGAGCC CAGCATCTGC TCAGAGGAAG GCAGAGAGAC  
CCAGAGGAAC CCAGAATGAG ACACTCATTT TTGCATCTC AGTTTCCAA TTAATTTTNT AGCTCTGGT TAGGACCCGA  
NTTNCAGAGA CCAGGCAGCT NTCCAACAAG AATGCTGACA GGTTCATTG TCCTCTAGGG TAGCTGCTGN CTAAAGAATA  
TTTGATTTTT TGGG

SEQ ID NO:1107: (Length of Sequence = 346 Nucleotides)

CTCACTTTAG TTTGAGTCAA TATCTGAGAA AAAAAAGATG GAGTAAAAGC ACAGAAAGCA AAACCTAGCT TAGAAAATAT  
TTCTAATTC AAAAAATGAA CAAGTCAGAT TCTGTAAAGA TATCCAGTGA AATCTTGAAG AAATATTGTA TTGATTATTA  
ATTAANCTGA TTGGAAGTG ATCTTGGGTT CACAATGAGG TTGTTGAACA AGTAGCATTT TCATACAATT GCAAACCAAT  
TCAATGTTTT TNCATACACT GTTTACATTT CTTTNCAAAA TTTGATTTCT TCTTCGTGAT CCTAGTCAAA TTCTGCCTTC  
TCAGTAAATC TTTATCAAGT TTGCAG

SEQ ID NO:1108: (Length of Sequence = 410 Nucleotides)

TCTTGGCGAC GTGGTCCCGG TAGGAGACTT AGACCTGAGC TGGATCTGTT GACCCCAAAT TGTGCTTTTC CCACCAAGAA  
GAAAGACAGG GAGAGAAACA TTAGTACAAG TNCCTGAATA AAATATAGCA GAGAAGAAAC ATAATCTCTG AAATCACACA  
GCTATTGGGT TTCAAAGCGT TCCTAGCGCC CAGCTCTCT AACTCCTGGC CAGTGTCTT GACATTATGG TAATACATAA  
AGACTTTGTT TCCGCTGGTG TGTGCTGTG GGAAGCCTCT GACTCACCTC CGTGCTCCAG TAGCACCTG TGCAAGCCTT  
CCAATGTGCG CTTATTGCG TGGCGCGGAA GATAATAGTT TGGATTNCTC TGCAAGTCAG ATAATAGCTG TATCCACTTA  
CTTGGCACAT

SEQ ID NO:1109: (Length of Sequence = 352 Nucleotides)

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CGCTCGTNTG TCCACACAA ATGTTTAAGA AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCCTGGCACA  
 AAAGATTCCA GTGCCCTGA AGAGGCTCCC TTCTCTGT GGGCTCTCCT AGAAAACCAG CGGGACGGCC TCCCTGCTGA  
 TACCGTCTAT AACCTTAGGG GGCCCTCGGG CAGGCAAACT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC  
 AATGNCACAN CTACTGGTTA CCCCTTTTGA GGGGCATTTT TCCAGACAGA AGGCCCTTG AAGCCTAGGT AGGGCAGNT  
 CAGAGATACA CCGTINTTTG TCTCGAAGGC TT

SEQ ID NO:1110: (Length of Sequence = 218 Nucleotides)

GTTTTNTTCA TTTATINNCT CCCCATAAAA CAGTATGTAC AAGGGTTTGA TTCAGGGGAG AGAAAGGATA TATGAAGACA  
 CATTCTTCCC TCTTCTATTC TCTTACCTGG TTAGAAATAA ATAGGCATAT AGTCCNGTTT ATTATGGGCA GGAAGGTAGG  
 TAAAGATCAC CTAAGTNCCT ATGGCGTGTG GCTTTTGGCA CATGGAGAAT GAGTTTTT

SEQ ID NO:1111: (Length of Sequence = 211 Nucleotides)

TTTGCTTTAT GAAGAAGCTG GCCTAGGTAG GGTACAAAT GGGTTTTACT GAACTTAAAC AGCTAATTGC TACATCTCTG  
 AAAATAATCA GAATAGAAAA ATAGATGGAA AAATTTCAAA CCCACTGTAA GAGACTAACA TAAATCCAAT TCCAAAAGCT  
 GTTAATCATA CCATCTAAAA AGAAAACCTG CGACTAATCA TGIGTTTACA A

SEQ ID NO:1112: (Length of Sequence = 360 Nucleotides)

CCCTATAATA GTCCCGTGAA TAGGGCTAGC AGTGGGATTT TTGIGTTATA GGCGAGGAAA TAAACACTCC TTTTGCTGAG  
 ACTAAAGAGC CAGGTTGGGG TCTCTGGACA CATAGTGCAA TCAAGGGAGG CTTAAGACAG CAGAGGCCCT CAGAGAAGAC  
 GTTCATTCTC CCAGCTACTT GCTAAGCACG TNCCTGTGTA TCTGGGCAGT CCTGGGCACA CCAGTGGTGA AAATACATGG  
 TCCTGCCTGC CTGCCTGGAG CTCTATTTTT CCTNATGGGA GAATGCTGCT CCATTTTGTT ATGGAGGAA CTTTTTGCAA  
 GCAAAGCCIN TTTGGGGAAA AATGGCGGGC TAGAAACCTG

SEQ ID NO:1113: (Length of Sequence = 448 Nucleotides)

GCGGCTACTG CGTTAGTGAT TAGAGTTTTT NCCCTGCCGG AGGTGGGATA CACGGTAGCA TCATGGTCGA GGAGGTACAG  
 AAACATCTCTG TACACACCCT TGNTTCAGG TCGTTGAAGA GGACCCATGA CATGTTTGTG GCTGATAATG GAAAACCTGT  
 GCCTTTAGAT GAAGAGAGTC ACAAACGAAA AATGGCAATC AAGCTTCGTA ATGAGTATGG TCCTGINTTG CATATGCCCTA  
 CTTCAAAAGA AAATCTTAAA GAGAAGGGTC CTCAGANTGC AACGGGATTC ATATGTTTAT AAACAGTACC CTGCCAATCA  
 AGGACAAGAA GTTGAATACT TTGTGGCAGG TACACATCCA TACCCACCAG GACCTGGGGT TNNTTTTGAC AGCAGATACT  
 AAGTTCCNGA GGATGCCAG TGATCAGNTG CACAGTCCTA GCGGTGGC

SEQ ID NO:1114: (Length of Sequence = 268 Nucleotides)

GGCGGCCAGG TGGTGCCATG NTCTTNTGTT CTGTGCGTCG GCGGATGTGG TCATCAGCCT GAGACCCAGA TAGGCTGAAC  
 CCCGACTGAT GTAGGTTGCG CACAGGAGGG ACGGAGATCT TGCTGGGCA GGACGCGCGG GCGGAGCGC CACTCCCTGG  
 CTTGGCAGGC ACCATCACCT CGTGGACGGG CCCGTTATAC AGCCACGGG GCACACCGTG GNTTCTNCGN CAGCCTGTG  
 CGAGCTTTGA TCCTCTTGTA GACAAAGT

SEQ ID NO:1115: (Length of Sequence = 342 Nucleotides)

ATCAGTGCCT TCTTCAGCTC TATCTGGGAC ACCATCTTGA CCAACACCA AGAAGGCATC TACAACACCA TCTGCCTGNN  
 AGTCTCTCTG GGCCTGCCAC TCTTGGTGAT CATCAGCTC CTCTTCATCT GTTGCCATTG CTGCTGGAGC CCACCAGGCA  
 AGAGGGGCCA GCAGCCAGAG AAGAAAAAGA AGAAGAAGAA GAAGAAGGAT GAAGAAGACC TCTGGTTCTC TGCTCAACCC

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AAGCTTTCTC CAGATGGAGA AGAGACCATC ACTGCCTGTT TAGTTAGGCA GGAANGCAGA GGTGTTTCCT TTCTGGGGCT  
AAAGNCTCCT TCTGACCACA CA

SEQ ID NO:1116: (Length of Sequence = 416 Nucleotides)

CACCTTTGGG AGGTAGGGAT CATAGTCCA CTTCATTGAT GAGGAAACT GTAGTGCAGA GATGGCATAC ACTGTCCAAG  
AACATGGTGG TGGATGGAAC CCAAACCCCA ACTTTTGCTC CCATGINCTC TGTCCACTGG CTATGGCTCT TCCCCCTGTG  
TACAGATACA GGCTCTGGAC AAGTTCACCA AATCCCTTAG GCTTCAGCCC CCTCATCTGC AGAATAGTGG CTTGGATTCC  
ACCATCTTCA AGGTCCCTGC CAGCTTINAT TTATTTAAAT TTGGATTTAT TAAGCAGGAA AAAAAGTAAT GGGAGTTTGT  
GGGTACCAAT GGATTAAAGG GGGTNAATC TGNGGCTNG TGAGTAAAT TAGGGTCCCC AAATGG

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AAGGACCGGG ATTCTGATGA AGCCGTGTTT CTCACTGCCT GAAGTTTCCC TTTGGAGTTC CAAAGTAAAG GACACATAAG  
CAACACTTCC AAAACAAGG GAACAAGGTG GTTTATTGTA AAAACAGGAA ATGGTGCAATG TCATTGAGAA CTATTTTAAAT  
GCAGCTATGA AAAGGGAAAA AAGTCCCGAG TTCTTGATTT CTATGATACT GAAGAGGACG TAGCATTTC ATTATCAAAT  
ATAAGGAAAA TTATTCACCA TTTTGAAGCT CACCTAGAC TATGAAAATT ATATTCAGTG CAGAGCAATT ACTTCTGTCA  
TTACCTGAAG TGATCAGTAT CTATCTTCCT TGTATAGCA TGCATCTCTC AAAAAGGCCT CCACTCCTTT CCTCACATC  
TGIGGTCATC ATGATT

SEQ ID NO:1118: (Length of Sequence = 379 Nucleotides)

GACAGCAGCG TGTCCAGGGC GGCTGTGGAG GTGTTCGGGA AGCTGAAGGA CCTAACTG CCGTTCCTCG AGGGTCTGTA  
TATCACAGAG CCAAAGACAA TTCAGGAAGT GCTGTGCAGC CCCTCAGAGT ACCGCTTGGG GATCCTAGAG TGGATGTGTA  
CCCGGGTCTG GCCCTCACTG CAGGACAGGT TCAGCTCACT GAAAGGGGTC CCAACAGAGG TGAAGATCCA AGAAATGACG  
AAGCTGGGCC ACGAGCTGAT GCTGTGTGCG CCAGATGACC AGGAGCTCCT CAAGGGCTGT GCGTGGGCC CAGAAGCAAG  
CTACACTTCA TGGACCAGTT GCTCGATACC ATCCGGAGGC CTGACCATTG GGTGCTCCA

SEQ ID NO:1119: (Length of Sequence = 233 Nucleotides)

CAATATTCAA GAGTCTTTAT TGAAGACTTG AGATGGGACT TCCAATCAG AGGATGTGGG AATCCCAGCT CAAATGATAC  
AGGATAAACT GGGATGGGCT AGGATGGACA GGCTGTGGAT ATGGGAGTCA TGGGTCAAAG TCTTATCCCA GATGGCTCCA  
GGTACAGTGG GCTTCCTGGG CTGGAAGCTG GTTCCTCCCC ACTTCATTCT GCTCAAAGCT TCTGAAGGA GCT

SEQ ID NO:1120: (Length of Sequence = 325 Nucleotides)

GAAAAACAA CCATACCCIT NCTTTTGAGG AAAACTTACA AACTTTATAA AGAATAACA TGAATCTNCT TAGAAAGTTC  
CAAGATAACA TACACAACCTG ANTCACTCT TCATATATAG GCACCACACA CATAAAGATG TAGCCTAAAT CACAATCACT  
TCTCACCAGG GATGGAGATA GGAATTTACA TTCTTGACTT CATTAAGTCT CTAATTTGGC AAAAACCTCC AAGCCTTTTA  
TACACATGCT GCGTGTAGGC CAGATCTCAC TCATTCTTAT AATTGTGCAA ATAATATGGA GACCAAAAGG GCAGGGTTTT  
CATTT

SEQ ID NO:1121: (Length of Sequence = 161 Nucleotides)

ATTAGTATTT TTGTCTGTAT GTCCTAGCAC TGTTCAACAA CAAATTTTNC TAGTCTTGT TAATTTINAT TTGTATACA  
ATGGAAGCAC AATGTTATAA GGAAAGGTAA TTTAAGCTA ACAACCAGTG CACAGCCTCA GGTTTTAAAT TACAACCACA  
G

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SEQ ID NO:1122: (Length of Sequence = 181 Nucleotides)

CATCTTTTAA CATCAAAGTA CTACCAAGTA AAGAATTAA AAATTACTTG TCTAGTCATG ATATATTTTC CTTCTGCTGC  
TGAAAAATCC CTGCTTATT ATTTTCATGTT CCTTTATCAT TCATTGTGATG AACTGACAG CAACTTGCTG AACAAAGTTA  
AGAATAGCTG ATATTACTG A

SEQ ID NO:1123: (Length of Sequence = 174 Nucleotides)

CCCTAGAGTT AAATTTCACC CATGAAACAT CAGCCACATG TCATATCAAT TCAAGTGTGT AACATTGATA TAATCGGGTA  
CACCACAGCA GCACTGACAG AACAGAAAT GATTGAGAGA AAGCCAATTA AACAGCCAG GGGATAAAGC AGATCTGTAT  
GACATTAGCT TTTT

SEQ ID NO:1124: (Length of Sequence = 232 Nucleotides)

CTTTTAGCAG AGACGGGGTT TCACCATGTT GGCCAGGATG GTCTCTTGAC CTCGTGATCC ACCCGCCTCG GCCTCTCCAA  
GTGCTGAGAT TACAGGCATG AGCCACCGCG CCTGGCCAG GGAAGGCATT TTINAAGAAA TAATAGTTGA ATTGAGATCT  
GATAAAGAA GTAGGAGCAA AATNGGGGG GTGCAGTTTT CCAAGAAGAG AAGACAGTAC ATATAAAGGG CT

SEQ ID NO:1125: (Length of Sequence = 233 Nucleotides)

GATACTATGG GTTCAGTGAC ATAGAGACAC AATTGAATTA GCAATGAGCT TCACTCAGGA GCCAGAGAAT GGGTTTNTNT  
CTAAGAGATG TTTTAAGTAA CATTTAAATG GCACTGCTGA TTGATACCAG CATCAGGAAG CTGAGGACAA GAGCTCTCTG  
AGAAGGAAGT TGCCATATTA CAGAAGTGAG GTGACCAAGC ACTTNTTGTA GGTCTGTACA TTTAGACATT AAT

SEQ ID NO:1126: (Length of Sequence = 258 Nucleotides)

TTTTTTTTTT TCCTAGGGGC CGCAAGACGG CTAATTTATT ATAATTCCTC CGCCGAGTT GCCCTCTGGC GCCA...JTCGC  
AGAACGGAGC GCGCGGGATG CAGGAGGAGA GCCTGCAGGG CTCCTTGGGT AGAACTGCAC TTCAGCAATA ATGGGAACGG  
GGGACAGGTT CCAGCCTCGG TTTCTATTTA TAATGGAGAC ATGGAAAAA TACTGCTGGA CGCACAGCAT GAGTCTGGAC  
GGATTAGCTC CAAGAGCTCT CACT

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GTGTGAATAG GCAAGCACTT TGTTTGTGT ACTAAGGAAC TCAAATGAT AGGCTTTTTG TCACCATGTG CTTCCAGNT  
CTCTGTTGCA TGAGCAGAGA TAGAGGATCT TGCACAAACA ATTAAATGCT CTAGCCATAA GTAGTGCAAG TTTCCNTTGC  
TTGAAATTTA CTGCTGATAG CCACTTGNC ACACCTTACT TCCAGAGGCT AGGAAGTACA GTTTTCCAC AGTCTAAGAA  
TGAAAGAGNA TTAACCACAG TAATGCATAG CACTCATACC ATGGATGACT GGATAATTTT AAAAGAATGG GAATATGCAA  
G

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ACAGCTCAAT GACTTATCAC AAAGCAAAGC CCAAGAAGT CACCACCCAG CTCCAGAAAT AACACATTGA AAAGCTAGAA  
AAATCTCAA TTGACATCCT AACACCACAA CTAAAGGNTC TAGAGAACCA AGAGTAAACA AACCAAAAG CTAGCAGAAG  
ACAAGAAATA ACCAAGCTCA GAGCAGAACT GAAGGCAATA AAGACACAA AACCTTTAA AATAGTCAA TGAATCCAGG  
AGCTGTTTTT TTGAAAAA

SEQ ID NO:1129: (Length of Sequence = 163 Nucleotides)



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CAGTGGTACA GCAGCAGCAG ACACGCATCG CAGAGCTGGA GAAGACGTCA GCTGAACACA AACACCAGCT GGCGGAGAGA  
AGCAAGACAT CCANCTGCTA AAGGCATACA TGCATGCAAT CCGCAGTGT CACCCCAACC TTCAGAACCT GGAGGAGACA  
ATT

SEQ ID NO:1130: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTACTGT TCAACAGCA ATGTTTAGTT GTACAACACA TAAAGTCTAG  
CAACAATTAC AGGNCCAGTT TGAGTGTCTG TTTGCTTGTT TTCAATTGGG AAATTTAACT GTAATGTCAC CGTAAGATTG  
GCTGGGACTG GTAACATTTA AGAAACGGGT TGTTCTTGCA TCCCCTAGGC GTGGGCCTCT TGCTCCATCA GGAATTGGTT  
GTAGATGAAT GGCCCAACAG TCACCAGCCT TTGAGCAAGT TGTGTCCAGG TGGAGACAGG AAGAGGGTGG GCAAAGGGGA  
ATTCTATAAA GACACAGTGT NTGGGGCAGT GGCAGTCAAC ATTCGCAAC ATTCATGCAT CT

SEQ ID NO:1131: (Length of Sequence = 406 Nucleotides)

ATGCTAATTC AGGCTCCACA GATAGTNTCTG GTGATGGGGT TACATTTCCA TTTAAACCAG AATCCTGGAA GCCTACTGAT  
ACTGAAGGTA AGAAGCAGTA TGACAGGGAG TTCTCTCTCG ACTTCCAGTT CATGCCTGCC TGTATACAAA AACCAGAGGG  
CCTGCCTCCT ATCAGTATATG TGGTCTTGA CAAGATCAAC CAACCCAAAT TGCCAATGCG AACTCTGGNT CCTCGAATTT  
TGCTCTGAGG ACCAGACTTT ACACCAGCCT TTCTGTATTT TGGAAGGCAG ACACCTGGTG GAAGAGGGGT ACCTTTTTTG  
AATGTTGGGT CACGAAGATC TCAACCTGGN CAAAGAAGAG AACCAGAAA GATCATCACA GTTCTGTAAA AGAAGGTGTA  
CACCTG

SEQ ID NO:1132: (Length of Sequence = 400 Nucleotides)

ATTTTGGT ACCTCAGGCA GGAGGGTAGA CATAGCACTT ATCTGGATTG GATGTAGCCA CAGGATTAGA ATTGTTGGGT  
CATAAAATAT GTACATGTTT AGCTTTAGTA GATCTTGCTT AGAGTTTAAA AAATTAATAA TTAATAATTT TTTTAAATTA  
CAATAAATTC AGCTAATTTT AATTTTAGAT AATTTTTATA ATGTAGTTGA TCTTGGTTTT AACCAGAGCA TGTNGCTGGA  
TTTTTCTCCC CAATCGAACA CAGTAGAGAG AGAAGGTGGC GGGTTCTTAG TGATACCATG CACTTTTTTT TAGAATTCA  
GTGCTGTATC CCTTCATTTA CAATGTATGA TGAAAAATAC TAAAGAAGGG ATNGTGGTGG TGGTGAGGGA GGCAGGAGAG

SEQ ID NO:1133: (Length of Sequence = 347 Nucleotides)

CCCAGGGCGC GCCATCCATG GACGAGCTCA TCCAGCAGAG CCAGTGAAC CTCCAGCAGC AGGAGCAGCA CTTGCTGGCG  
CTCAGACAGG AGCAAGTGAC AGCGGCGGTG GCCACGCGG TGGAGCAGCA GATGCAGAAG CTTCTGGAGG AGACCCAGCT  
AGACATGAAC GATTTTAACA ACCTCCTGCA GCCATCATC GACACGTGCA CCAAGGACGC CATCTCGGCC GGAAGAAGT  
GGNTGTTTCA CAATGCCAAG TCCCGCCGC ACTGTGAGCT GATGGCCGGN CACCTCCGGA ACCGCATCAC GGCTNATGGG  
GGCACTTTC GAGCTGCGGC TGCACCT

SEQ ID NO:1134: (Length of Sequence = 389 Nucleotides)

GGTCCAGGCC TGCAAGACTT GCCTAGTGAG AAGATATAGG AATGGGAACC CAGGTAACAG TCTGGCCACT TTNCCATAGG  
GCTGCTGCAG TATGCCCAGG GCCCGCTCCA GTCTCTAGTA GCCTCANATT TTCCAGTACC TGGAGTTATC ATCAGTGAAG  
CCTGTGAAC AGCAAAGATG GCAGCCTACC GCTCCCTTTG GAAGCTTTGC CTTAGGGAGG TATGAATGAN CTNTTGTCTG  
GCCCAAACAC ACCTGTAGGA GTTGGCTINGA GACCCAGTT TGGAGGTTTT GCCCAGTGAG GAGGAATGGC ATTGGGAAAG  
TGCTTAAAAA AGCAGTCTGG GCCTCATTTT TATAGAGCAG CTGTGCTAAT GCTGAGGGGT CCACAATCA

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SEQ ID NO:1135: (Length of Sequence = 402 Nucleotides)

GCAGAGGCTT AAAGAGTGCT TATTCAGTGA GGCTTGCCCT TNCTTACTCC TTCTTGGGAA CCCATTTGGC AACAAAGTGAA  
 GAAACCTAGG CCAGCCTNCT TGAAGATGAG GGACCAACGG AGAGAGAGGC TCTGCTGTCC TAGCCCTCCC ACAGAATAAG  
 TAAGCCTAGC CAACACCACG TGGAGCAGAG ATGAACCATC TCAGTTGAGC CCAGCCCAAA TTGCTGACCA AAAGAATTGG  
 GAACAAATAA ATAATTATTG TTTTAAGCTA CTGTGTTTCT GGGTGGTTTT GTATATAATA GTAGCTACCT GATACATTGG  
 GATGACCCCA ATTACTTGAA CTCTCTTAG GCGTGTTTTA TCACGTGCAA ATAGGGGATA ATTTTAGTAA TTINGGGTTG  
 CT

SEQ ID NO:1136: (Length of Sequence = 381 Nucleotides)

CAGGTGCGAG CCACCACGCC CAACCCAGAA CTCTTTTTAT TTTGCAAAAT TGAAATTCTA CCCATTAAAT AGCAACTCTN  
 CTTTTCCCTT CTCCCCAAG CCCTTGGCAA CTGCTTTTCC ATTTCTATGA CAATCTCTAC TCTAGATACC TCATAGAGGG  
 TGAATCATAC AGTATTGTG CTTTATGAC TGGCTTATTT CACTTAGCTG CTATATTATT AATACCAGCT TTCTGGGGAT  
 ATAATTCACA AACTGCAGAA TTGAATGGTT TINAGTCTAT TCACATCGGA TATGTTTTTG AAGAGACAGT AAAACCAATC  
 CTTTTTTCCT TAGGTTCTCA GACACACACA TGCTTCTTTA TCTGGCAAGT CCCGTTATAA A

SEQ ID NO:1137: (Length of Sequence = 325 Nucleotides)

TATTTTTTGT ATAGACAGGG TCTGTATATG TTGCCCCGAC TGGTCTCGAA CCCCTAGTCT CAAGCCATCC CCCTGCCTTG  
 GCCTTCCATT CCTCTACTTT ATACCACGGT TATTCACCAA GCTGTCTTT GTTCAGTGT A CTTCCTCATG GAAAACTGA  
 GGTGATATTT ACCCTGGTTT TTCTACCAGT GTGTAACGT CGCTAGTACC AGCTCAAAAA ATAAGAAATG AATAAATGAG  
 TGATGACTAT CACTATGTG CTCAGGCTGG ACTTGAACCC CTGGGTTCCA GTGATCCTCC CGCCTCAGCC TTCCAAGTAG  
 CTGGG

SEQ ID NO:1138: (Length of Sequence = 422 Nucleotides)

CAACACACAT TAGCCTTAAC AACAAAGAGC TAATCTTATG TAAAGAACTC TTACAATTCA GAAAGAAAAA GATCCTAGTG  
 AAAATGTGGG CAAGAGATAG CAAAAACCA GCCATATGAT AATAATAGTC AATAAGTGAA TCTGAATGAT GTTATCTNCT  
 TTGTCAATTT TAGAAATACA AATAAAAATG ATGATGAATG CACTGTCTTA CTAAATTAGC AAAANCITGG AAAAGATGAT  
 GATATTCAGG GTCAGATAAA GGGAAAAGGG TGCCCTTCTA TTGCAGTTTG GAAAGTAAAT TGGCACTGAC TTTTAGTGGG  
 GATAGTCTTG TAATATGGGT CAAANGTCTT CAAATCGTGT CCACATTTTG GGGCCTGCAA TTCCACTTCT AGGGATTAT  
 TCTAAGGAAG TACCTAAAAA AT

SEQ ID NO:1139: (Length of Sequence = 367 Nucleotides)

ATACCGAGAA GCATGCAAGC GGTGGCTCCA CGTCCACAT CCATCCCCAA GCTGCTCCTG TTGTCTGCAG ACACGTTTGT  
 GATACACTCA TTCAATTGGC CAAGGTATTT CCCAGCCACT TCACACAGCA GCGGACCAA GAAACAACT GTGAGAGTNA  
 TCGGGAAAGG GGCAATAAGG CCGTAGCCC ATGCTCTCA CAGTCTCCA GCAGTGGCAT TTGCACAGAC TTCTGGGACT  
 TATTGGTAAA ACTGGACAAC ATGANTGTNA GCCGGAAAGG CAAAGAACTC CGTGAAGTC AGTGCCAGTG ANGCGCTGGC  
 GGTGAGGGGG TAAACCTTTT NCATACAGCC TTCGAGGCT CTCCACT

SEQ ID NO:1140: (Length of Sequence = 412 Nucleotides)

ATCCAAAGGA TATAGGCAAG CATCAGATAC AGCCAAAGCA TTCTTTTCTT AAAAGAGTCT GAACGCATCT NATGCAACAC  
 CCAAAGTAT CCTTTNCTC CTCGTTACAG TATGTTTTGG CTTTGAATA AATGATTAGT TATGAAACA TATATGGAGA  
 AATATCTTAC AAAAGGAAGT CATTTCCATT TTCTAACATC TTTTACATTG CACTAATTAC ATGGTTTTAA TGACTATCCC  
 TAATCTTCAT CCAACTACAC CCCATGAATT TNAGGTTTAT TTAATCAACC TAGTTAGACC AGATATATCC TTCTAAAATC

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ATTGTAGAT AGAGGATTCT CCTTTTGTCT AGTAAATACC ATTAACATAT TTNCAGANGG CCTGGTCTAG GGTCAATTTAT  
TCCAGGGCCT CT

SEQ ID NO:1141: (Length of Sequence = 410 Nucleotides)

GTTAACCTGT GCGCGCTCC GGGTATCCGG CGCCTGANGT TTTAGCTGCG GTGGCGGCGG CAGTCGGGAC CGACTNAAGA  
TGTCATTTGT CAGAGTGAAC CGCTGTGGTC CCCGANTTGG TGTAAGAAAG ACACCGAAAG TAAAGAAGAA GAAAACITCA  
GTGAAACAAG AATGGGATAA TACCGTGAAT GATCTAACCG TTCATCGGGC AACTCCTGAA GATCTGGTAC GCCGTCAATGA  
AATACACAAA TCGAAGAATA GAGCATTAGT AACTGCGGAA CTCCAAGAAA AAGCTTTGAA GAGAAAATGG AGGAAGCAGA  
AACCAGNAAC TTAAATCTT GAGAAAAGAA GATNGTCTA TCATGAAGGA GGTCTCTTC TGATCAATAC CAGATGCAAA  
GATGTGTGG

SEQ ID NO:1142: (Length of Sequence = 392 Nucleotides)

TTTTTTTTT TTTTTTTTT TTTTCNNGG ATGAATGTC TTTATTAAAT AAACGAGTAA ATGGTAGCAC AAATCACCAT  
CAATATTTT GGAAGGATTG GGGACAAGAT GTCAGTCAG AATATAATTN TCCATTTTCTAG GGTCTCAATG TAGCTGAAGA  
ACTGTGCCCC CTGATCAGTA TTACGTATTG CAAATGCAGG AGGTAAAGCT AAAATAGGAC TTATGCCGTT CAGAAGATTG  
ANITTTGAAAC CTTAAAACT ATCATAATAG TAGGAATGCA TGTTAAGATT TGATAACTTT CTTTAGCTAG AGTTTTCAAC  
CCACAGTTAG GAGCAAAGTT GTAAAGTGAG TAGGTNTGAA GAAGGGACAC TCTTTTGAGA AAAGAAATTN GC

SEQ ID NO:1143: (Length of Sequence = 200 Nucleotides)

ACTTCCTCTC TCCTGGCATC TGCTATAAAA ATAAGAAGGA GCAATATTC TTGCCTCTTT TTATCACCTG ANCIGAAAAC  
CCATTGTAAC TGCCATGAAA ATAAGCACTG GTCCATGAGA CCAATGCCCA GAAAATTCTAG GCTAAGATTC CTGGAAAGTG  
GGCTGTGGGC ATTATTTAAA ACACACACAC AAAATTTACC

SEQ ID NO:1144: (Length of Sequence = 333 Nucleotides)

AACAGAAGCA TGTTATTTCA TTCCATTCC CAGAAAGGGA GTTAATGAAG ATAAAAATTT ATTTTTTAAG GTCTTTATTG  
AGAGAACTT TGTTTTCTGA TATGAATAT TGCAGATGT TTTATAAATA CTTCATTAA AATGATGTA ACAGTAGTAC  
CCAACACTGT AAACCTCAGT AAAATAGTAA ATGATTCTTT TATTACTAAG ACTGTCATGC ATTCTGAAGC AGTTGGCTTT  
TTTTTAACCA TAGGAAGTCA TTCCCTCTA GCTCCTTCCC TTCTACTCTC CTGCTCAGAC CATTAGTAGG TACTTTGTTA  
AATAAAAAAC TAG

SEQ ID NO:1145: (Length of Sequence = 225 Nucleotides)

TGGGTTTCTG ATCCGAGAAA AATTGAAAGA CAAACATGGC TGGGGGAAGC AAAACGCTGA CACACAATTC AGGTGGCCCA  
GCAGTGCTGA CTGCAATCC ACCCCACCCC AAGGCAGCCC TTTCATCCA AAGTGGACAG AGTGGGCCCTT ATCCAGANT  
CACTCAGGAA GCTTCTTCAA ACATATGACT GCCACACCG CCCCCAAGGT TCAGAAACAT CTTG

SEQ ID NO:1146: (Length of Sequence = 223 Nucleotides)

AAGGNACAAT ATTATTCTAA ATAATTTAGA TTTGGAAGAC ATCAATGACT TTGGAGATGA TGGGTCCTTG TATATTACTA  
AGGTTACCAC AACTCAGNT GGCAATTACA CCTGCTATGC AGATGGCTAT NAACAAGNCT ATCAGACTCA CATCTNCCAA  
GTGAATGTCC CTCCAGTCAT CCGGGTGTAT CCAGAGAGTC AGGCTAGAGA GCCTGGGGTA ACT

SEQ ID NO:1147: (Length of Sequence = 389 Nucleotides)

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ATTTCAGTGG CCATTAAGAC CCTGAAAGTT GGCTACACAG AAAAGCAGAG GAGAGACTTC CTGGGAGAAG CAAGCATTAT  
 GGGACAGTTT GACCACCCCA ATATCATTCG ACTGGAAGGA GTTGTTACCA AAAGTAAGCC AGTTATGATT GTNACAGAAT  
 ACATGGAGAA TGGTTCCTTG GATAGTTTCC TACGTAAACA CGATGCCAG TTTACTGTCA TTCAGCTAGT GGGGATGCTT  
 CGAGGGATAG CATCTGSCAT GAAGTACCTG TCAGACATGG GCTATGTTCA CCGAGACCTC GCTGCTCGGA ACATCTTGAT  
 CAACAGTAAC TTGGTGTA AGGTTTCTAA TTTGGACTT TCGGTGTCC TGGAGGATGA CCCAGAAGC

SEQ ID NO:1148: (Length of Sequence = 386 Nucleotides)

ATTAATGCT TGCCATCATG AGCAGAAGCA AGCGTGACAA CAATTTTINAT AGTGTAGAGA TTGGAGATTC TACATTCACA  
 GTCCTGAAAC GNTATCAGAA TTTAAACCT ATAGGCTCAG GAGCTCAAGG AATAGTATGC GCAGTTNATG ATGCCATCT  
 TGAAAGAAAT GTTGCAATCA AGAAGCTAAG CCGACCATTT CAGAATCAGA CTCATGCCAA GCGGGCTAC AGAGAGCTAG  
 TTCTTATGAA ATGINTTAAT CACAAAATA TAATTGGCT TTTGAATGTT TTCACACCAC AGAAATCCCT AGAAGANITT  
 CAAGATGTTT ACATAGTCAT GGAGCTCATG GATGCAATC TTTGCCANGT GTTCAGATGG GGCTAG

SEQ ID NO:1149: (Length of Sequence = 364 Nucleotides)

GGCAACAGGG TGAGACTCCA CCTCAAAAAA TAAAAAAA GAAAGATATT ATTCAAGAAA AGAACTTAGG AGCCAGGTGC  
 AGTGGCTCAT GTCTATTATG CCACTACTTT GGCAGGCCAA GGCAGTAGGN TCACTTGAGG CCGGGAGTTC AGAGACCACT  
 CTGGGAAACG TAGCAAGACC TCGTCTCTAC AAAAAAGTG TTTAACAAAT TAGCTCAGTA TGGTGGCACA TGCCTGTAGT  
 CCCACCTACT CAGGAGGCAG AGGCAGAAGG ATGGCTCGAG CCCTGGAATT CAAGGCTGCA GTGAACCTAG ATGGTGCCAT  
 TGCACTCGNG GATGGGTGAC AGAGCAAGAC TCCATTGCCG CCAG

SEQ ID NO:1150: (Length of Sequence = 267 Nucleotides)

GACAGGTGTA ATCTAAGCTT AAATAAACCC CCGGAGGCT GCACAATTNC TTGGCATCTC TCCCCTGCCC TCTCCATCCG  
 CATATTCATT TTGGAGTTTG GAGAAGTATC TAGAATCTNC TCCCACCCCA AAATGCCAG CAGAGCCCCC CCGCGCCCC  
 CGCACCCCTT GGAGCTGCGG CTGCTGAAT CGTTGAGATG TCTGANACTG TCGGGGTCC CTACCTAGTG CTTCAACCAG  
 ATCACTCAC TTTTGAGTTT CCTTCCT

SEQ ID NO:1151: (Length of Sequence = 386 Nucleotides)

GGAGACGAA GGAGGAGTAA AGGCATGINT CACATGGCAG CAGGCAAGAG AGCGTGTGCA GGGGAAGTGC CCCTTATGAA  
 ACCCTCAGAT CTCGTGAGAC TTATTCACCTA CCATGAAAAC GGCACAGGGA AAACCTGCCC CTAAGCTTCA GTTACCCCCG  
 ACAGTCCCT CACATGACAC ATGGGGACTA TGGGAGCTAT AATTCAAGAT GAGATTGGG CAGGGACACA GCCAAACCAT  
 ATCAGATACT TACCACATTA GACACTGACA GACAGCTCAC CACAGATTCT GGGCTCTATT CAAGGTGTTG ACTTTGATCT  
 TTTTCAGTT GTAAATGTTT CATCCAAAAA AACTGTGATT TTGGCATAAC TTTTTCAGG AGTTGC

SEQ ID NO:1152: (Length of Sequence = 239 Nucleotides)

GCAATCTTTT GAGTGACTTA CTTTGAGTCT TTGTACCTT TCCTCTGATT TTTTCACATG GTTTAACTCA GTGTACCCAA  
 GAGTACTAGG TGCACCTAAT TCTGCTATTA ACTCTATAAG CAAGTCTTA AGAAAGTTAA TGTAAAAA TAATCTTAA  
 ATTGCTTGA TAGGAAAAAT GTATTGAAA TAAAAAAA TTCTTATGTT GACTTCTTGG TTTTGAAACA ATGAATATA

SEQ ID NO:1153: (Length of Sequence = 275 Nucleotides)

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CAACCTCCTC TTCAGTGTCA AAAAAGCCAC GGTTAGACCA GATTCTCGCC GCCAACCTTG ATGCAGATGA CCTCTAACA  
 GATGTATGTT TTGTTTCCTC CTTTCATCTC TAATAATTGA TTTACCATGT TTTTCTAAAA TACTTGTAT GTCCTTNCCT  
 TAAGAAGTGA CATATATTTA TGTITAGTGA CTGTTATTCA AATATAGCCC TGACCTCAGT GCTAAACTTT ATAGTTGATT  
 TTAAATCAA AAGTATTATT TTGTGGGACT TTAAG

SEQ ID NO:1154: (Length of Sequence = 203 Nucleotides)

CCTAAATCTT AAACCTTACA ACAGTTAAAT AAGACCCCTT TCAAAGGGAT TAACACACTG AATATTATAT ACATACAGAT  
 TTATATTTAT GCGCTATACA CATATATGGN CTTTATCTGT ATATAAATAT GTGATGATAA TGATAAAAGG ATAATGATT  
 CACGTAGGAT AACATTTAT CAAAATTGT ACTATAAATA ATA

SEQ ID NO:1155: (Length of Sequence = 343 Nucleotides)

GAAAACAAAA CACTAAGCTA TTTTGGACA ACTGTTCTAC ACAGAAGAGA GCTTCTCTTA ATTTAAAAA AAAAAAATC  
 CCAATAGGC ATTTTAGGC ATTAACCAA AAAGAGAATC CAAATGAAAT ATTATACTTG ATGTTCAATT TTAATAGCAT  
 CTTGATAAAG GTATGCTTCC TTTCAITGA NTACATTTCT GNACATGTAT GTTATAAAAT CCAGGNAACA GCCAAACCAC  
 AAGTTAACTC TTAACAATGA ATATACATAG TTAACCCAT AGTAAGCAGC CCCTTTGAAA AGCACTGATG CACCCAACAN  
 TTATATGGTT CCATTTTATA AGG

SEQ ID NO:1156: (Length of Sequence = 396 Nucleotides)

CCCACCAATT GCCATTAAAC CTCCCAATCT TTAAGGGAG GNTCTCTACT TACTGTTTCA AGGCAAAAAG ATGATTAAAC  
 TATCTCACAT GGTGTAAAT TGGGCCATAA ATAAATGACT CTAGTGGTAG CATTTCATGT AGGCAGGTCC AAGGAAGACA  
 GATTGTAGA CAGAGTTGGG AAAAGGGTCA AAGAGCCAAT GAGTCTCCCT ATCCTGAGGG ATGCTTGAC GGAGCCACAG  
 CATGANCTCA TGTTTTCTG AATCCATCTC AGTTCATGTG ACAGGATGGA AATGCTTCCT TTCTTAGCCA GTGTTGCTTG  
 TAACGAGTTC CTTGAGCTC AGGGAAGGGA GCAACATGTA CTGCTTTGTT GCTTCTGTA TAGAGAAGGC AGGAAT

SEQ ID NO:1157: (Length of Sequence = 269 Nucleotides)

CAGGGTCTCA ATCCGTCTCC CAGGCTGGAG TGCAATGGCA CAATCTCAGC TCACTGCAAC CTCCACCTCC CGGGTTCAAG  
 TGATCTCCT GCCTCAGCCT CCCTAGTAGC TGGGACCACA GGCACCTGCC ACCGCAACCA GCCAACTTTT GTATTTGTAG  
 TAGAGACAGG GCTTACCAC GCTGGCCAGG CTGGTCTCAA ACTCCTGACC TCAGGTGATC TGCTGCCTC GGCCTCCCA  
 AGTCTGAGA TTCCGGCGTG AGCCACTTG

SEQ ID NO:1158: (Length of Sequence = 190 Nucleotides)

CTTATTAGTT AATTCCACCG CAGATTTTCA TTCTATCGA ATATATTATA TGTAGAACT AGGGCCTTAA ATAATTAAGC  
 TGACTTINCC TATTAGTTAT TCCTTAAGAT AAAATTATGC TGGTGAAAT NACTGNGAA TTCTCAAGA AATTAAGCTC  
 TATAGAGGCA TAAGTAATCG AAAGACTTTT

SEQ ID NO:1159: (Length of Sequence = 340 Nucleotides)

GGGCACTGAC TTCCTGGGAG TGTAAGCNC TCACCTGGAC CCCACAGCCA GTGAGCATTG GTGCTTATAT TCCATCCTCC  
 AAAGCTCTTT CTTACATACA GACCACAT GTGGCCCAAG GAGGGATATT TACTCTGCAC TTTTAGAGTT CTAGAAAACA  
 TTGTTTAGTG GTCTGGCATC ATCTATATTT ACTTGGCTTG ATTTGGGATA GAGTATAATC CTAGTCTCG ATGAAAGGAT  
 TTINATGAGT TAACCTTATG GGGTGATGGG ATTATGGGA TTATTTCCAC CCTTAAATG ATTTTGTTGG GAAAAAAGT  
 GTACTAATCC CTAATTTAGG

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SEQ ID NO:1160: (Length of Sequence = 215 Nucleotides)

GTAAACAAAT CAATTACAT GATTATCCCA GACCTTCTT TTCTTACTGG AAAAAAGAGG GCATTAAACT GGATGATGAC  
AATAACACCA TAACTACAAG CTTTTATAAA AGTCCTTTAT ATACAGTGTT AATACAGTGA AAGNTCAACC TTATTGAAAG  
AGGTCGGCT TCTGCCCTCA GCTACTGGGA AACAATCACT AGGCCTCTGG CATGT

SEQ ID NO:1161: (Length of Sequence = 298 Nucleotides)

AATCTTTAAA ACTACTTTGA ATCTTATAGA AACATCAGAA TCTTTTGAAT TCAAAAGAAG CCAGGGACTC TAGCCAAAGT  
GGAGTGGTTT TTTAACTCAA GGATTTAGGA CCTTGGCTGA ATACAAACAT TGAATGATTA CTCAGTAGGT GCCAAAGCTC  
AGGACTTTAC ACAGAGTCAG AGTCCAGTTT GTNCTGAAAC ACAATTTGAT TTCAACTATT GTTTTAAGTG AGAGAGGAAA  
GTGACATTAT TATGAGTGTA AATTINCTGC TTTTAAAGTA GAAGTTACTG ACAATIGA

SEQ ID NO:1162: (Length of Sequence = 163 Nucleotides)

GAAATAAGAA ACAGCTTGTA TATAACTAAT GCCTTGAGGG AGAAATTCAA ATGGCTATGA AAAAAATTTT ATAATTCAAT  
GATAATAAAA ATCTTACACG TTAATACTTG AGAATGTAGT TAAAGCAATA CTGGNCATA ANCTTAGCAC ATATTAGTAA  
AGA

SEQ ID NO:1163: (Length of Sequence = 393 Nucleotides)

GCCAACACCA GGAGCATTTT ATTCAGATGT TAAATGAACC AGTTCAAGAA GCTGGTGGTC AAGGAGGAGG AGGTGGAGGT  
GGCAGTGGAG GAATTGCAGA AGCTGGAAGT GGTATATGA NCTACATTCA AGTAACACCT CAGGAAAAAG AAGCTATAGA  
AAGGTTAAAG GCATTAGGAT TTCCTGAAGG ACTTGTGATA CAAGCGTATT TTGCTTGTA GAAGAATGAG AATTGGGCTG  
CCAATTINCT TCTACAGCAG AACTTTGATG AAGATTGAAA GGGACTTTTT TATATCTCAC ACTTCACACC AGTGCATTAC  
ACTAACTTGT TCACTGGATT GTCTGGGATG ACTTGGGCTC ATATCCACAA TACTTGGTAT AAGGTAGTAG ATT

SEQ ID NO:1164: (Length of Sequence = 260 Nucleotides)

TGCATTCTTG CCTCTTTGAC AAGTTCTGCT TCTTTACAAA GGACTTTGCA AGTNCITTCAC CCAGACCATC TCACCTGTAC  
CGAAATAACC TCCCCTACTA GCGAATGAGC AACTTTGGAG CAGAAAGCAG AAACCTGCATC ATATTTCTCT TACTATGCAA  
ACTGGTAGCT CAAACCTCAT ATGACCTCAA AAAACTATAA TTGCTTCAAC CTAAAAAAGC TGATTGTAAA AAAAAAAAAA  
NGCTGTGGTT GCACACAGT

SEQ ID NO:1165: (Length of Sequence = 330 Nucleotides)

CATTGGTATT TAAAAATGAA TATTAATATA ATGAAATGGN TTTGCCTTTT TGTAGGCATA ATAAGCCAAA TACTTTTTTA  
CCAAAATAA TTTINAGAGA AAATGATGTA ATGAAAAATT GTACCATGAA TTAGGAGCAT AGTTTTINCC ATTTAAACGT  
CACCATTACT TAAAAGATGA TTGATTATTG CTATACCAA TCAGATGAAC TCTGTTTCATC ACTTTCCINC TCTGTCCCA  
AACAATTGG TTCATTGAGA CTGAAATGTT TGTGTCTTCA ACTTATTAGA ATGGAAGATA ATGCAGATAT TTCTGTGGGA  
AATAAAATAA

SEQ ID NO:1166: (Length of Sequence = 312 Nucleotides)

ATTGGAGATG CCTTTGCAA ATTNCCCAT TTAAATGGC CAGGAAAAAC AATAATTATT TTCTGATGC TGAGGTTTTA  
TATCTTAGTA GAAGAACTTA AACTATGACT TGTATTCAAG TCTAACAGGA ATAGAGGTAA TGANTGAAAG TAGTCATTGA  
CCTGGGACAA GATCACTTTG AACATGACAC TATTATACAA AGTGTAAATAT TTATTTTAA ACAACCACTT TTCAAAGCA

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GTGTGTCATA CATTCCAAAG AATAAAATGC TAGCTACTAG GTTTTGAGAA GCAGAATAAA ATATGATACT GA

SEQ ID NO:1167: (Length of Sequence = 305 Nucleotides)

AGGAAAAGGA TTGATCACAG GAGAGGTACC AAGGGAGTTC CCAGAATAAT AGAAAAGAGG NTCCTCAAGA AGACAGTCAC  
GCAAGAGACC AAGAGAAGAG CTAATCCAAT TGATGCAGGA GGAAGTAGAG CTTCAGAAAG AATGTCTCAA AAAAGAAAAA  
AAAAGAAAGG AGTGGGTTAA GTATCTGATG ANTTTNCCTAA ATTGAGAGGA GTTACATAGC TCTATTGAAA ATCTTAGATA  
AANNIGATTG ATAAATACAT AGANCATAAA GCAAACACTG AAATAAGGCA ATTATCAACT CCAGG

SEQ ID NO:1168: (Length of Sequence = 342 Nucleotides)

AAGGTTTTAG TGATGATTCA GTGAGAAACA TATTTGAAGC AACAAGCACA GTAACGGAA GCTGTAGGTA CTCATAAGT  
GTCAGTTTCC TTCCTCTTCT AAAAGCTGTG CTTTCAAGTC AATTGTATGT CTAGAGTCGC ACTGTCTGGT ACAGTGGCCA  
GTACTAGCCA CATATGGCTC TCAAGTACTT TAAAGAGGGC TAGTCTGAAT TGATATGTGT CATACTGTAA AAATACTTTA  
AAGAGGGCTC ATCTGAATTG ATATATGCCA TGCATGTAAA ATACAAATCA GATTTCTAAA ACTTTGTACC AAAAAATACC  
ATAAAATAAC TTACTAATAA TT

SEQ ID NO:1169: (Length of Sequence = 397 Nucleotides)

GAGACGGAGC TCCNTCTGTC GCCAGGCTGG AGTGCAGTGG CACGATCTTG GTTCACTGCA AGCTTCACCT CCCAGGTTCA  
CACCATTTCTC CTGCTCAGC CTCCCGAGTA GCTGGGACCA CAGGCGCCCA CCACCACGCC CAGCTAATTT TTTATATTTT  
TAGTAGAGAC GGGGGTTTCA CCGTGTAGC CAGGATGGTC TCGATTTCTT GACCTCGTGA TCCGCCCGCN TTGGTGTCCC  
AAAGTGCTGG GATTACAGGC GTGAGCACCA ATGCCACGCC TTTGAGAGCA CTTTIGATTG CCACAACCTA GGGTAGGGAG  
GGCTGGGAAA TATTACTGGT GTGTAGTGCA TCGAGGCCAG GGATGCTGCT AGACATCCTG CAATGCACAA GGACAGG

SEQ ID NO:1170: (Length of Sequence = 422 Nucleotides)

GTTTTAAAGC CTCTGGACAG AGCAGTATTT CGTTTAAAAC TTTGTTTTTC TTAAAAGCTT ACAGTGTGTTG GCTAATTTCTC  
CTCCCTTTT TACAAGACGG GGGCCGGAGG GTGGACACTG GTGGCAGGTT AAGGGATACT GTCACTTTAA GAAGCCTGCA  
GATTGAAGTG TAAACATGGA GAAATTAGGG GCTGATTTTT TAACTGTGT GAGATATTAA CCAGCCGCCC TGTATATAAA  
TCAGGAAATC CAAACAGCGA TTTACACCGA TTAACACCCC CTTTATATAT TTTTACAAA AATACACTGA GAAAATAATC  
AAACGTTTTT ATCTCTCTTG TCTTTTTTTG TTTTTTAAAA GTGTCAAAG TCTACATNTA AATATAAAN ATTAAAGTT  
AAACTCTAGC CCTTCAGTGA GG

SEQ ID NO:1171: (Length of Sequence = 384 Nucleotides)

TCTGAATGGG TTGGTGAAAG GTTACAGGAG CAGACACCT CCACACCCAG GCTGCTCTTG GCTATACAGG CTACCTCCAT  
CCCTGANTGT TGTAATAGGA AAGTCTAAAC ACACAGAAGA GGAGCACAAA ACCAATAATT ATCACACATT CAAAATAAAA  
CTAATCCATA AAGAAAAGTA CCAAACCTCA CAAAGACAGC AATGCCTGAA AACACTGGGC TGTATCAGCA AATAGAACAA  
AGAAAAATAN GCATAATTAA AACAGTAGAA GGTGAAGGAT AATTTTTTAA ANTTAGATAT CATATTCTGA TTATTGAAAT  
AAAAAATTA GTAGAAAAGC TTAAGTGAAG AGGATCAAAC CTGAGGAGGA CCCCAGCAGT TTG

SEQ ID NO:1172: (Length of Sequence = 418 Nucleotides)

GAGAGAAAAA AAAAAATCT TTTAAAAGCT GCCATCTGAG GTGATGGCTT CTCTGTACTT ACGCCATACC CCAGANTACA  
ATAAATAAGC AATTAGAAAA CGTTCAAGTA TGAAGGGATT TCCTCCTCCC CGCCAAAAGC ACTGCTCTCT GAAGGAAGCT

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GGTTTCTCTG TAGCTACACC AGCTGTTTCTG AAAGCTCATT GGACCTGGTT TTGAAAATAA AACAAAGTTA AAACCCTGGG  
 AGGAGTTATT GTCAGTGTG GAGTACTCAG GCTTTCTTAT AAAGAAAAA AAAGGTTATC TGGTACCAA GTGTGCACCT  
 ACAGACCTC AGGTACTGCC CTGTGACTTC NCTGTATGAC ATCACAAGGC TGCCAAGTGC TGCTTTNCTA GACTAGGGAG  
 TTGGTGAGGT TTTGCTAG

SEQ ID NO:1173: (Length of Sequence = 274 Nucleotides)

GAGATCTAAA TGAAATTTAT AAGAAAATTG TGGGTTCTGC CCAAGATGAC ATCTAAATTG AAGAAGGTAC ACAGTGAGTT  
 TAAAGGATCA ACGAGAGAAA CTTTTATTAT TCATTTCAC AAGAAGACAC ATTCAGTATC TGGATTATCC AATATATGGA  
 ATACTTTGAG TTGAAATGAT TAAAGGGTAA TCTTTAATCA TTAATTAACA AATCATTAAAT TAANCAAAAT AATATTTAGC  
 AAATTAAGCA AGTNCATAAG GCTACATGCA AACT

SEQ ID NO:1174: (Length of Sequence = 326 Nucleotides)

AGAAATTTAAA ACACTTTAAAT ATAAACATTT CCAGAATATA GACTGACCTT ATATCAGTAC TTTTNGAGAC CGTTTTAAAA  
 CTATATATCA TCTAAGTTTA TTATAGACTG TTTCATTTTC CACTTTCAGA ACTAGAAAAT GCAAAAATAC ACTGCAAAAT  
 AGATTTAACA AAGAAAAAAT CAGTTTAAGN TATTTTCATAC ATATTCCTTG GNGAAAGCTG AGACACATAA ACACAGNAAA  
 ACAACAATAA AATACCACCA AACTTAACAC AAAACCAAGG AAAGAAGTGN TTTTGTAAAG CTGTGTAATT CTGTCCCTTA  
 AAATAA

SEQ ID NO:1175: (Length of Sequence = 426 Nucleotides)

GCAATCAGGA TGGACACATT AGAAAGAAAC ATTTTAGTTT CAATGTTACC ATAAAACCAG AACGAAAAGC AGCATGCTGT  
 ATTATATTIN NCAATTTAGG TTCCATTTCT AACTCCACCT AAAATGAATA TGAACAAACT CATTTTTAAG TGTGTCAG  
 TCAATATCAA TAATAGTCTA AGTTTATTC CATATGTACC AACCAAAGCC CAATAAAGCT AAAAGGAAGC CAAGTGTAAAT  
 AAAAAGGCAG CTATAAGGTC TTGTGTTTGA NTTTTTACCC AGCAAGAAAT AAATGATACT TAGTAATCCA TCTTTCCCCC  
 CCACTGCCAT CCCTGCACAC ATCTAAAATA GGCTAACTTC ACCTATTCTA ACTTCTGAAA TGTGTTTGGG ATTCTGTTT  
 TACTTTCTCA GAGTGGATGG TATAGC

SEQ ID NO:1176: (Length of Sequence = 301 Nucleotides)

CTAATCCTCA ATCCTATCCC TTNCCCTCTT AGCCATCCTC TCTAATTTNT TTAACCTAAG CCGTGTGTGTC CTCAGAAAAT  
 AGGTTATGCT GTTGGTGTGT GTGGTTGGTA ATCTATATAC ATGNGTTTAT GCTATTGATT TTGTTTGGTA ATCTCCCTTT  
 TTAATCAATA CTATATTTAT AAGANCCNTT TAAGTGGTGT TATGCTCTA CTTTATGCT TCTGACTGCT GCATGGNATT  
 CCATACTCAT GTCCACCACA CTACTCATT CTCCCTCTG ATGGACGCTG AAGTGTCTTG G

SEQ ID NO:1177: (Length of Sequence = 331 Nucleotides)

GCAATTCTCC TGCTCANCT TCCTGAGTAG CTGGGATTAC AGGTGCTGAC ACCACGCCCG CTAATTTTTT GTATTTTTAG  
 TAAAGACAGG GTTTCACCAT GTTGGTCAGG CTGGTCTCGA ACTGCTGACC TCATGATCCG CCGGCTCAG CCTCCCAAAG  
 TGTGGGATT ACAGGCATGA GCCACCAAGC CCGGCAAATC CATGCTTTTA AACATTACTC TGTATGGTGT GATAATGAAC  
 AGTCACTGNT ATCTGACTGT TCATCTGTGT GGTCCATCTG TATTGAATAA AGGAGGAAGG AGTTGAAGAA TAAAGGGGAA  
 AATCTTGCAG A

SEQ ID NO:1178: (Length of Sequence = 325 Nucleotides)

GAAATTTNTG GAGAGAATAG TCATACCTAC TTTAAAGAG AATAAATTGC CTTTCCTAAA TNCCTCTGCT TCGTCCCTTT  
 CCGGCGTTG CTCTGGAACC TTGTGAGTTA TATGTATGAT TNCCTGACTC TGATATCCAT CAAAGTGCAT AACATAGTAC



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TCATGATGCA GTAAGTACAA ATCTTTTGTG AAAGAGATAT TGCTTGTAAC CATTTTGGAT TTATAACATT GGCTTATAAT  
ATATACAACA TCTTTATAAA TGCCACCTCA GTTGGGTTTT AAGCCTTACA AGAGTGCTAT GAGTAAATAT CACCCACTTT  
AAAAA

SEQ ID NO:1179: (Length of Sequence = 297 Nucleotides)

CCTTGGGAAT TGTTTCTTGG AAATTAAAGC ATGTGTCTCA CACAAACAGT AGAAGGCATT GAGCAITCAT TAGTCTTTCC  
TCAAGAAGAT ATCAAAATGA GACTAGAAAC TCTCTGGTGA ACACAGAATG CTCTGAGGGG GNCCAAGGTA CATTATGACC  
TTAAAACGAA CTCCTTCTCC ACTGGCCCTA TTAATCACTG TGGAAAGCAC CATGCCAGGC ACAGCAAGAG ACTTAAGAAC  
ACCTACAAAG GAAGATCTCT NCCATCCACT TGTGTAATTA TCTTTAAAAA GTAATCC

SEQ ID NO:1180: (Length of Sequence = 278 Nucleotides)

GCTGCTTGGG ACTTGAAATC TGTGGCCGAA GACCGTCAC TACATAACTT CAAAAATAAT CAACCACCCT CCTTCCCAA  
ACCACCCAAA TTCACTCATC CAGCGTTTAC TTTTGTGAAT CCCTCAGAA CTTTTTNCIG CGACCCCCCT CCTAAATGG  
AGTTGGGTGG GGGGGAAATG AATACTGAGT TGGCCTTAT TTTTAAAAAG ACTTTTGTAT CCAATGAGGC CCCCTAAATA  
ATTGAGTTTT GGGTCCGGT TGGTTGTGT TATTTGT

SEQ ID NO:1181: (Length of Sequence = 331 Nucleotides)

AATTGAGTGA CAGGAGAATA CTGTGAACAA TTGTACAGCT AAAAGTAATA ATCTAAATTA AATGTACACA TTCCTAGAAA  
CACACAAATC ACAAANCTG ACTCAAGGAG AAATAGAATA TCTCAACAGA CCTATAACAA CTAAAGATAT GGAATCAGTA  
ACCAAAAGCC TTCCAACAAA GAAAAGCCCN GGANTAGATG ATCTTCACTG ATGENTTCTA CCAAACATTT AAGAAAGATT  
TAACACTAAT TCTACTCAA CTCTCCACA AAAAATATGA GANGAGTAGA GAAACTTTC TAAATATCT TATGAGGCA  
GCATTACCGT G

SEQ ID NO:1182: (Length of Sequence = 345 Nucleotides)

GTGTGNTIAG AGGGATGGAC AGGATGCTGT TTATTNCCC TTTCTTGGAA ATGGACCTTC TGTCCTTCC ATTTGGACAC  
CACAGTGGAA GCTGGTGGCC TGAAGGAAG GATTAGGTCA TGGACATTG AACAGGTGCC TTGGGCATGA TGTATAGATG  
CAGTCATATA TACCTTGCTG GGTGGGGTGG CCACCTCCAG TGGNCAGCTC CAGATCCAAG GAGCAGCCCC CTGGGGATGG  
ACCCCATTC TATCATGA CTCCCAACAG TTTTINATTG TGAAGAAGA AACTTTNGCA TTATAGAGAC ATCATCACAA  
AACAGTANAA ACAAATCAA CCTG

SEQ ID NO:1183: (Length of Sequence = 272 Nucleotides)

ATGGAAGATT CAGAGATCAA AGGTGAAGTC CTCTATCTCG GCTACTACCA ATCAGCCTTC GACTGCVATG ATGAAACANC  
CAAGGCCTCC AAGCAGCATC GTCTTAAACG CTACCACAGC CAGACCTATG GCAATGGGTC CAAGTGCGAC CTTAATGGGA  
GGCCCCGGGA GGCCGAGGTT CGGTTCCTCT GTNACGAGGG TGCAGGTATC TGTGGGGACT ACATCGATCG CTTGGACGAG  
CCCTTNTCCT GCTCTTATGT GCTGACCATT CG

SEQ ID NO:1184: (Length of Sequence = 335 Nucleotides)

ACATTTTGCA AACTCAGTTG ACTCACTCA NATTTGCCAT TCCAATTACA GGGCCTCGAA AGAGTCAGCA CTCAGCCTTG  
CTCAAGGNTC AGATTTAGGG GTTGCCCCC GNCCCCGCAA CCTCCACCT ATTGTTTCAA ATGTCTCAA GACAATCACC  
ACTGTATTAA GAGAAAGAGG CATGGGGGCA GAGCAACAAG GAAATAAATG AGGCTTGAGA ACTGTGTCTA GGTGGGGTTA  
CTTGAACCT TAAACCACC TTGGNCCCA AATCTGCATG AGCAGGGGT GGGCTATCAT GCTACAGANC CCAAGGAGG  
ACATTTTCC CAACA

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SEQ ID NO:1185: (Length of Sequence = 383 Nucleotides)

GAGAGGTGAG CAGGCGTGCG GGGGGGGGAC TTCTGCAGAG AAAATATTTT TAAAGTCATA AAACCATGAA AATAACAACT  
 ACTGTACGTT TTATTTTATA GAAATCAAGT AGTATCTAAT AGACAAGGGA AGACATTGAT CCATAAACTT TTTAAAGAAA  
 ATTTGGTAAT CTCTTAAAGT ATTTGTATGG CTTTGAATGG GGTGNCCTTT CTAACCTTGT TTTAATTTT ATGATACACT  
 TATAATTGTT TCAAATAGGC ATTTGTGNCAT TTTAAACTA CTAGAAGTTA CACTGAAGAA AAGCATTCAA AAGAAGACTT  
 TTGGACAAA AAAATTGTTG AATGAGTGAA ATGCCTGAGG TAGCTCAATT TACCAAACAG GAA

SEQ ID NO:1186: (Length of Sequence = 373 Nucleotides)

GGGGCTCAAG GTGTGCATGT NTGAGGGAAG AGAGAGAGAG AGAAGGCCGC CTCANAGGTG ACTTTCAGCC TGCNAGCCTT  
 CTTCCCGGG CGCCATAAAC GCCCCCAATT TCCCAGCTGC TAAAGGAAGA GGAAGGTACC TGTCGTGCA CGCAGACGGG  
 AAGGGCTGGG GAAGCGGAG GACTGAGAAA AGCCAGATCT TAGCAAAGCA ATGTCTCAAG ATGGTGCTTC TCAGTTCCAA  
 GAAGTCATTC GGCAAGAGCT AGAATTATCT NTGAAGAAGG AACTAGAAAA AATACTCACC ACAGCATCAT CACATGAATT  
 TTGAGCAGAN CAAAAGGGC CTGGGTGGAT TTCGGAAGCT ATTTATAGA TTT

SEQ ID NO:1187: (Length of Sequence = 365 Nucleotides)

TCCACGCAAT TCTGAATAAA GTTTATTAAA TAATATGTAC AGCAAATGTA GTAATTCAAC ACATCTATTT ATCAAATCAA  
 TCCACTGCAA TGAAGAAAAA TAAATGANCA GAAAAATCTA TGTCTGCATA GGCATGCTC TCAGTGTGTA ATTTAAATGG  
 CAATACITTA AATTAATTGG TTATATATAA TGTCAGTTAT TTTCCTTTCA GAATATAACC TTTTGTGAG TAACCTATTC  
 TAGCAATAGG GCTTAATACG NCTGCAGATA AATAGGNTCG CAAAACCAA AAACCCAAA TAATGAAATT NAAAAGGGGA  
 AAAAAACTGT AACTGNGNTC AGAGTTACCT TTCTCCCCC ATAGG

SEQ ID NO:1188: (Length of Sequence = 350 Nucleotides)

ACTATGGCT TACATTTATT TTAAATTTCA CTAAATACAA ATCTTGATTG TCATGCCAGT TTTAGATCTT ATTAATTTNC  
 AGAATGGATA AATTCAAATA ATCATAAATT ACGGTAACTT TTTATTATAC CAAGGTGTTT TAATGCCATC ATATGANGAC  
 AGATGCTTCA AACAACTGC ATTAAATTAT ATTTNNAATA AAATTAAAT CTATTTTAA CCTATTGTGA GTCACAAACC  
 GAAAACGTGT CGNCTTTACC TTAGAGCTAA AGGCTTACTT TATGCATACG GGATATTTAA TAGTCTACAA ATCAAAGGT  
 TAAACAGNCC CTTAAAATT CCATATATTC

SEQ ID NO:1189: (Length of Sequence = 393 Nucleotides)

GCAAATTC TCACTTCCTC AAAGAAGAGT AGTGCCTAA AAAGAAGGTT GCACCCGGAG AGCATGTAAA GTGTCTCAAG  
 GGGGACATCT GAAGTNCCTT GTTCCAGGG AGCCCACTGG CTCCTCACA GTAATCTAAT GAAAGCTATG CATTCTCTCT  
 GGGCTCTCA TATGAAAAAN CCCAATGTAT GANGCAAAGC CTAGAAAGGA TTCAATACTG GAGAAATGCA CACAGCTACC  
 GATAAGACA GCTCAAAAGT CCTAAGGCTG CTGACATGAA CCAGATAATT GGTGGCTACA GTGTGCTCTG CTAAGATTTG  
 GGTGCATGGG GCTTCGCTTT GGTAGCTCC CATGGTCTTC TTTTCCAAA AAAAAAAG AAGNCTTCAG GTT

SEQ ID NO:1190: (Length of Sequence = 365 Nucleotides)

AGTGTAACA TTCACATATT TAATAGTACC TTTAAATATA GCATTACTAC ATTTAAATG GTTCCAAAT GAATCTATAA  
 ATGGTAATAT AAATTAAAA ATACGAATTT AAGTGAATA AATTTTAACT CTTAGCTATG GTATAAATAA TGGTAAATGT  
 ATAGTGTACC TGTAGTCTAT TAAATGTCT TAAAGATAA CAGCTTGTTA CCAGAACATT AGANACCATA GCCATGATTC

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TCAAGCGNTA ACAATCTACA TTGNTATTT NCTTGGCCAC TGCATTCTTC AAATGANTAA TAAATTTCCA GAATTCCCAT  
TCCCATGGTG TTTTCCCAA TAGANCTTTT TCACACTCGA TGTTG

SEQ ID NO:1191: (Length of Sequence = 303 Nucleotides)

CCGGAGAGC TGCCTTCCTC TTCTACCACG TGAGGACACT GCAGGAAGAC AGCTGTCTAA GAACTAGGAA GTGGGCCCTC  
ACCAGACATT GAATCTGCGC TCCTTGAAC TGGACTTCCC AGCATCCAGA ACTGTGAGAA ATAAATTCAT GTTATTTATA  
AACCAACCTG TCTATGGTAT TTNTGTAGC AGCCTGCAGC TCTCTATCAC TCTGTITTAT AAGAGGCTGA AGTTTACTTT  
ACCTCAGGCA GAGCTAAGCA AAAAAGATTA CATCCGATT ACAAGATGAA AGTAAACAGA ATT

SEQ ID NO:1192: (Length of Sequence = 315 Nucleotides)

ACTCCAGCCT GGGGAACAAA CAAGCAAGAC TCCATCTCTA AATAAAAAAG AGTGTCCCC TAAGATGCTC TCGAAATAT  
TGTAGACTGG TGCTCTCTT GGATGATGTT TGCGTCAGC ATTACCAAAA TAAACTTGCT CTCTGGGAAA AAAAAAAAAA  
TAATAAATAA AATAACAGT AAGAAACACC CATAAANCA AATTTCTATGC TCCTGCAGCC TCTTTTGGC TGAGCAAGTG  
GGACCTGGT ATACACATCA CCTGTNCTN CCTTTTCTT TGAAATGTTG TGTGTGCTGT TAAATGGGA TTGAA

SEQ ID NO:1193: (Length of Sequence = 313 Nucleotides)

CGAATTAGTG AACTGTGCTT CAGGTCAGG AACCTGGTCT TAGCTCCTTG CCTGCTGAGA TTTTGAGTTA CAAGTAGAAT  
TCTCCAAAAG CAAAACAGT AAAAGTCATT TTNCCACTCT TTTGGTCAAG CACATGTAAG CTTCAGGAC CAGGTGGTAT  
GCCGTNCTG AAAGTGAGAC ACATGCCCCA GGGAAAGGT AATTTTAAA TTCTTCCAT AGGTCTCAT CCTGTCTC  
TGCTATGTCC AGCATCCTN AGTCCAGCT GCAGGGCTA TATTTAAATA CCTCATGCT TTATCGCTTT TGT

SEQ ID NO:1194: (Length of Sequence = 341 Nucleotides)

GATTTAAAAG CAAGTATTT TNAATCCAC GAAAGATGCC TACCTTGGNT CCTNCTCTGG TCCTTATTAG CCACACCTCT  
CTTGACAGGC AGAGGAGTTA GGAGTGAGG GATATTCCA CCAAGACCCT ACAAAATGCA CTCTAGGCC ATGCCCTGGG  
TACCCAACT CTAGAATTC CTCTCAAAG GGACCTAAC CCAACTTCAG AGCCTATATA GGCCAATTC TTGGTCCATT  
TTCCAAGGG TGNCAAAGG ACAACCATTT TNGGGAGGN GANGGGAGTA GGATGAAGCT TTGGNCACGT GGGTCTTGGG  
CAAATCCAC ATATCCCGA A

SEQ ID NO:1195: (Length of Sequence = 239 Nucleotides)

TTATTGATTC TTTTITGAA ATGGAGTCTC GCTCTGNNC CCAGGCTGGA TTGCAATTNC NCGATCTCAA CCCACTGCAA  
CCTCCGCCCT CGGGGTTCGA GCGATTCTCC TGCTCANCC TCCTGAGTAG CTGGGACTAC AGGTGCGCGC CACCATGCC  
AACTAATTTT GGTATTTTA GAGACAGGT TTCTCATGT TGGTCAGGCT GTTCTCAAGC TCCCAACCTC AGGTGATCA

SEQ ID NO:1196: (Length of Sequence = 291 Nucleotides)

CCATGCTGG CTCAGGGCCT GGGGCGGGT CCTGGGTAGA GTCCTAGCCC CAGAGCCCCA GCCCCTCATG TCCTGCGGCC  
CCTCACTGAC CAGACGATGA TCGNAACT CTGAGAAAA CATGGCAAAG GATTAGAAAA GGGCAGGGTG AAATTNCCAA  
GCCACTCAGA CGGAACCCAG ATGATCTTCA ATGCAGCCAA GGAGCTGGGT CAGCTGTCCA AACTCAAGGT TCACATGGTA  
CGAGAAGAAG CCAAGAGCTT NACCCCAAAG CAGTGC GGG TTGTTGAGT T

SEQ ID NO:1197: (Length of Sequence = 303 Nucleotides)

CTTCATATTT TTATAGCTGG GGTCAAAATA TGCAATTTAA AAATAAATAT ATCCATTNCT CTATCTTAC ATTTATGAAT  
ATAAAANTAA AATCTAAGAA ACATAATGCT GCCAACTAAT AGTAGTGGAG GAAAGGAAGC TGAGAGAAAG ATAAATATAT

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TANTTTAATC ATTACTCAGA AAAGGCAGTA AAAGATACTA TCTATAGCAG GCATCAATAA ATATGANCCA TGAGCCAAAT  
CAGGCTTACC ACCTGATTTT NTAGGATAAA GTTCATTGNA AACACAGTTA CAGTGTCTTT CCA

SEQ ID NO:1198: (Length of Sequence = 318 Nucleotides)

CTCAATTTCT TCTCATCTTT TINATGCTAT TATTGTCATA TAAGTIACAT TCCTATACAT TGTGTGTCCA ACACAAATTT  
AAAATTATGC CATTGTCTCT TAAGTCATAG AACAAAAGAG ATACAAACAA AACATACATT TATCCTGTCT TTTATATTG  
CCTATGCAGT TACCTTTACC AGTGTTCCTT ATTTCTNCAT GTGGATCTGA GTTACTGTCT TTNAACTTCA ATCTAAAGNN  
CTTTCAGTCT GAAAGACTGT AATTINAATT TCTNGTAGGG GTAGGTAAAC TAATGATTAA TTCTCAGTAT TCTGAGGA

SEQ ID NO:1199: (Length of Sequence = 326 Nucleotides)

TCTAGTTATT CTGAGAACTA CAACCAAGAA AAGAGGGAAG CACCGGGTTG GCCAAGGCCA TCCGGAGACT TGTCTGTCTG  
GGTCATTTAA AAAGCTTTTC TAGGATAACG TTGGCTTTCC AAGTGGTTTT CCAAGCTGAT GTCTTTCCCA CTGAGGAGAA  
GCTGTAGGCC TGTGGACTGC CAGGTAGGAG GAGGTTGAGG TTTAGAGGAA AGAGGAGAGC AGGAATGGGT TGTITNCAGT  
GGGGCTGTTC CCATGGACTC ACCAAGAAGA AATCGAGGTG CTGATGGGGC TGCACAAGTG CTTATCAGAA ACAGCTGTAA  
CAAGTT

SEQ ID NO:1200: (Length of Sequence = 341 Nucleotides)

GGGTGACAGA GTGAGACTCA GTCTCGCTGA AAAAAACAAC AACATTGCTT TACAGTGTGA TTCCAGTTAC AGAGAATATT  
CACATAGGTG CATAAATAAA TGAAAAAATT ATTGGTTAAT GTCTCTGTAT GTTGGGATTC TCAGTGATTT TTTTTNCTA  
CTTTINATTT TINATAATTC CTCCAGTGTG TTGGTGTAG CTTTATAGAT TATATCAAGT AACCTTTTGC TGCACCAAAA  
AACCCCCAA ATCTAGTGA TTAACAACAA ACCATCTTAC AATTTTNTC AGAACTGTCT AAGGCTGGAT ATTTTACTGG  
GCTCTCTCT GAATGTGGGG G

SEQ ID NO:1201: (Length of Sequence = 312 Nucleotides)

GTCTTINITA CCCTGCTAGC AATAGCTCTC AGTTTCAGAG GCACAGTCTT TGGAGACCAT TCAGCACTGA GAAAGCAATA  
TTTAGAACCT ATTGCAAAAC TGGGCTGAG TTAGGCATGG TGATGAATGC ATCAGCAAGG AATAGAAAGT NCTTATCGT  
AAACCTTCA ACCTCAACTA TGCCTTCATA GACACACACG TTCATGCACA TGTAGGCACA TGTACCATCT CACATCTTTC  
ACTTTCCCGA GATGCCATAT ACAATTACCT ACATTAATAN CTGTAGCACT ATACCTTTTT GAGCCCGAGA GA

SEQ ID NO:1202: (Length of Sequence = 344 Nucleotides)

GGAAATAGC CAGACTGGGT ATTATGCATG TAACAAATGA GGACATTGTG CATAAGAAAG GAAACATTAG TTTTCTGTCA  
TCCTGGGCCA AGTACCTCAT TACAGTAAAT GTGTGTCTTT GGAAACTCTT TGCTGTINCT GATGGCGGTA AGCATGGGGT  
CCCAGGCAGG TTCAAAGGCT GAACTGTAAG AAATGGGCAA GACAATACAT TTTGTTTTGG AAGGAATTTT TCATGGGATA  
AGTTTCCCAA AGCTTGAATT ACAGGCTATG AAATAAGCA AATAGATGGA GGAGAAAACA AGTATTGTTT TCAAAAAGGT  
ACCAAGTCAA TTCTATTAA AGGA

SEQ ID NO:1203: (Length of Sequence = 370 Nucleotides)

GTCTTTTATC TTCTCTCT TATGTGCACT ATGTAATGTC CTCATCATTT TAAAAGTGAG TTGCTATTGG GCGGGGCGCG  
TGGCTCAGC CTGTAATCCC AGAAGTTTGG GAGGCCAAGG TTGGTGGCTC ACTTGAGGTC AGGAGTTCAA GACCAGCCTG  
GTCAACATGG TGAAACCCAG TCTCTACAAA AAACACACAC AAAAAATTAG CTAGGCATGG TGGCACACAC CTGTAATCCC  
AGCTACTCGG GAGGCTGAGG CACGAGAATT GCTTGAACCC AGGGAGGCGG AGGGTTNCAG TGAGCCCAAG ATCGTGCCAC  
TGCACTCCAA GCTTTGGGGT GACCAGAANC GAGACTTTCT CAAAACAAAA

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SEQ ID NO:1204: (Length of Sequence = 346 Nucleotides)

CTCTTTAGAA AGCCTGCCTT GGCTGGGCCT GTGGGCTCAC CTCTAATCCC AGCAGTTTGG GAGGCCAAGG TGGGAGGATT  
 GCTTGAGCCC AGGAATTNA GACTAGCTGG GGCAGTGTAG TGAGACTTTG TCTCTACCAG AAAAACCGGG CGTGGTGGCG  
 CATGCCTGTA GTCCCAGCTA CTTGGGAAGC TGAGGCAGGA GGGTTTGCTT GAGCCCGGA CGTGGAGGTG GCAGTAAGCT  
 GTAATTGTGC CACTGTACTC CAGNCTGGGT GATAGAGTGA GACCCTGTAT CAAAACAAAA CAAAAAACAA AAACCTGCCT  
 TCTNGGGAAT GGGCTTCTGG GTTTTT

SEQ ID NO:1205: (Length of Sequence = 292 Nucleotides)

TACAACGAGA CACTTGAGCA CACGGTACA CCCAGACATC TTCGGGCTGC TATTGGATTG ACTTTGAAGG TTCTGTGTGG  
 GTGCCGTGG CTGCATGTTT GANTCAGGTG GAGAAGCACT TCAACGCTGG ACGAAGTAA GATTATTGTT GTATTTTTTT  
 TTTTCTCTC TCTCTCTC TTAAGAAAGG AAAATATCCC AAGGACTAAT CTGATOGGGT CTTCCTTCAT CAGGAACGAA  
 TGCAGGAATT TGGGAAGTGA GCTGTGCAAG TCCTGAAGAA GGAGATTGT TT

SEQ ID NO:1206: (Length of Sequence = 336 Nucleotides)

TTGCCAACAC AGTGTGTCAT GTTTATTGGG CTATTCACAG GTAAGCTTAA AATACAATGA AAAGAAAAGA CCAGACGTCA  
 TCAGGAATGT CGAGAAACAA AATATTTAGC ATTCTTAGT TTCAAATGTT ACCATTTCAT TGCAGCTGAG GAATATAGGC  
 CATTCGTGA CATAACTGCA ATGGGTGAGA CTTATTTTTA GCCACAGGAA GCAAATACAT TTAACCAATG ACTTTTAGGA  
 CAGGAAGCAA AAAAGAAAAC AATATTTTCA TGTAGCAAGG ACAAGANAAT CATTTATACA AATTAAAGTG GATATTAAAA  
 TACCATTATA AAGAGG

SEQ ID NO:1207: (Length of Sequence = 319 Nucleotides)

TGCCTCANCC TCCAGAGTAA CTGGGATTAC AGCGCCCCGC CGCCACGCCT GGCTAATTTT TGTATTTTTTA GTAGAGATGG  
 GATTTTINCCA TGTGTGGCCAG GCTGGTCTCC AACTCTTGAT CTCAGGTGAT CCACCTGCCA CAGCCTCCCA AAGTGCTGGG  
 ATTACAGGCA TGAGCCACTG CGCTGCCTC CATTTCTTTT TTATAATTCA TCCCTGAAGT CCGTTAAGGT AGAGAAGCTG  
 TTGATCGTC CCAGCCCCTG GGAGGCTGAA AGGTAACTIN ACCAGCTCCA TGCTGAGTT TAGCACCTGC TGTGCCAGG

SEQ ID NO:1208: (Length of Sequence = 357 Nucleotides)

GAGATGTTTA AAAATGAAGT GGAAGTTTTT TGTTTTTGTT TGTTTTTGTC AGAAAAAAGA TTTTAAATGG CTTGAATGTA  
 CTGCCATAGT TGCGTCAGAT TGTCAAAAAA TTATGTTGTA CATCTGAGAG AGAAAAAGAAG AGCCTTTTGA GGAGCTGCGC  
 TAAAATTATT TTTTGTITAG TCTCTTAACT CTTTGGCTTG AATGAGTCAT TGACTTTTCT TGCCAAGATA GGGTTAGCAT  
 TTGTTTTGIG TTTTAAAAGC AGGCCAAGGG ATTGCCACGA GGGGAGACAA CCTGAGCAAC TGAAGGAAGG AATTTCTAGA  
 AATGTGTTTT ACCAGTTGTT TTAGTCTGAA TGTGATT

SEQ ID NO:1209: (Length of Sequence = 362 Nucleotides)

CCCATCTGCT CCACCCAAAG AAATCAGACA AAGTAAATTT TATTGAGACA GACAGAAATG CACCTACTCA GGACTACAGT  
 TAAGCATTTA CTATTAACCA AAGAGTTGTG TTCACATTCC AGATAAGTCT ACGTGGAAAA GCATTTCAGAA TTTACTAGGT  
 TTTTINCTACA TCACTATTTC ATCTACAATA GGGACAACAA ACTGACACTC AGGATTTGAT GGGCTCTCAT TACAATGCTA  
 TACATTTAAC AGGGNCAAAC ATCAGTGAAT TTGAGGAAAA AGTTATAAAA NGACCAAAAC CACCCACTGT AGGATGGGCT  
 CTGGATGTT ACTGTACAGC GTGGGTCAAG GTACAAGGA GG

SEQ ID NO:1210: (Length of Sequence = 349 Nucleotides)

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GAGAAGATAG TAGAGAAAGT CAGCGTTACA CAAAGGAGAA CCAGSAGAGC TGCCCTCTTTT GCCGCAGCTA CCACTTCCCC  
 TACTCCCGA ACTACAAGAG GTCGTAGGAA GAGTGTAGAG CCACCTAAGC GTAAGAAGCG GGCCACAAAG GAGCCCAAAG  
 CACCAGTCCA GAAAGCTAAG TGTGAAGAGA AAGAGACTCT GACCTGTGAG AAGTGCCCCA GGGTATTTAA CACTCGCTGG  
 TACCTGGAGA AGCACATGAA CGTTACTCAT AGGCGCATGC AGATTGTGA TAAATGTGGC AAGAAGTTTT TCCTGGGAAG  
 TGAGCTGTCC CTTACCAGC AAACAGACT

SEQ ID NO:1211: (Length of Sequence = 344 Nucleotides)

TTTTTTTTT TTTTTCAGG GAAGAGCTTT ATTGCTTCCA TGGGGGTGGC CTGGGACGGC TGCCACAGCT TGGGTAAGCT  
 CCTTGGGCCT CANTTCCCTT TGGTCCAGGC TAAAGGCAGA ACCCAACCAC CTGGCAGINT TGTGTCTGAA ACCTAGAACA  
 TGTGGCAAGT TGGTGAAGTCC GGGCCTGCGG TAGTCTATG GNTCAGCTGC AGCTGTGGAG GGGAGCTCTT CCCAGCAGGC  
 GGANTGGGCG TCACCCTCCT GAGCTTTAAA GTTCTTTCTG CTATAGCCCT GGGGCGGTCT TGTGGCTCC GAAGGAATGG  
 GCTCCAGGGT TTCCCATGG GACA

SEQ ID NO:1212: (Length of Sequence = 364 Nucleotides)

AAAGAAACC TGGTATTTTC ACCATCCTCT CTGAAAATAA ATACTTTGAC TTGCACTGAT TACTACTTCA TCAGCATTC  
 ACTCCGCTCC GTGGCACTCT GTGTGAATAA TTTTAAAGGC AGATTAAAGCA TTCTAAAAAT AAATTCTATT GGTAAATTAG  
 GATATCAGAT GCTTCCATTA TAAAAGCCTA TCCTATTCTG TACTCTCAGC TGGCAGTCAT ATCCAGATCT CAAGCTACTC  
 TGGCTCTTAT TGAACAAGAA CCTATTCCAG GNGTGAGGT TTTGAAGAGG GGATCTCTCA TGGTTAACTA GAGNCAGGAA  
 GAGGCAGAAT TGCCACATA CTCTNGCAGG AGTTAAATAA CAAT

SEQ ID NO:1213: (Length of Sequence = 302 Nucleotides)

CTAATTTTIG TATTTTITAGT AGAGACGGAG TTCTACCATG TTGGCCAGGC TAGTTTCAA CTCCTGACCT CGGATGATCC  
 ACCCGCCTCG GCCTCCCAA GGTGTGGGAT TATAGGCATG AGCCACTGTG CCCGGTTACT TTTTCCCTTT TTAACACT  
 GAAATTGCTG TATCTACCAC ATTAACATT TATTTAAAAA AATTGTGTTA ATAGCATATG TATGTAAATT TAATATTAAT  
 ATACCTCTTT TTTGTCTCTT CTTAGGTGG TTGGAGCCTA GGGATACTTA CTTACTGATT TT

SEQ ID NO:1214: (Length of Sequence = 317 Nucleotides)

CTAATTTTNC AGACAGGTTT ACATGTAAAA GGCTAGGTAT TTAGCCACCT CAGCATTGAT TAGTTTGGGA TGTCTAAGCT  
 CTGTTACACA TGGCTTCCCA TGGCTTCACT CTACAAAACA TATTINCAAC GTGAAGGNTA CATCTACAAG AAATCTACAT  
 TTCAAGGGTT TTACAAATCA ATCTTGATC TTTCCCTGA ATTGACTCTC ACAGACCCCG TCCCCTTGIN ATTNCCTTGG  
 CCCAGCTTAA CGGTCCAAAG TCTACTTAAA TGCAGCTCAA AAATGTTAAG ATTGGGCAAC AGATTTACAG TTCTGT

SEQ ID NO:1215: (Length of Sequence = 276 Nucleotides)

ATAAGGTATT AAACAATAT TCTTGACTT GANTTAAAA AAAATCAAGC TGGGTGCAAT TGCTCATGGC TGTAATCCCA  
 ACACTTTGCT AGGGTTAAGT GAGAGGTCA GCCCAGAAGT TCAGTACCAG CCTGGGCAAT ATAGTGAGAC CCCTTCTCTA  
 CAAAAAAAT GAAGAAATTA GCTGGGTATG GTTGCGATG CTGTGNCCT AGCTCCTCGG GAGGCTGAGG CTGGAGGNTC  
 ACTTGGGCCC AGAAGGTCAA GGCTACAGTG AACCTT

SEQ ID NO:1216: (Length of Sequence = 354 Nucleotides)

GCATAGGCAG CCCCTGCTCT TGCATTIACC TCCCACTGA ACTAGCTGCT CAGTCATTGC TCTGGAATAT GGAGTTGTGA  
 TCTAGAAATT AAAGATGGGA TTAGGTAACC AGTGAGGTCC CTTCTACTGC CAGTGATGA CTCTCTCTT TGTAATGTC  
 ATATGTAGGG TTCTGTACAC AGGACATTT CTTCAITGTA GTTCTCAGA TGCATTGAGC TCTCTGAAT GACTTAGCGG

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GGAAGCTCAG TTGCAGCTGA CCGTATTAAG GGTCTCTCC CATTGTGCTG TGCCCGCTCG TTAGCGTAGG ATTCTNGCCC  
CACGGCCCTT CCTGTTTTCT AAGGGCTTGG CTTT

SEQ ID NO:1217: (Length of Sequence = 272 Nucleotides)

CTTCCCAGCT TTGCTTGTT GTAAACAGCT GGCAGTGGT ACATCTATAT TTGTTAAGAG GCAGAGCACT GTATTTTG  
TAAGATAAGG TGCTAGTCTT GGCCAGGCTG CCAAGCTGGG GCTNTTTAAA ATAAAAGTTT TAAAGAAAAA TTATAGCATA  
ATAAATTACA CAATTTTATT GGAAACTGA AGGTGTTCAA CCAATGCTAG TTTTAAATA TATTAGAAA TACTATTTCA  
GGAAATTTTA ACTACACTCA TTAGTCTTAT GG

SEQ ID NO:1218: (Length of Sequence = 281 Nucleotides)

GTGCCCAGG CTGCAGTGA CTTGTGCAA CGGGCTCAC TGCAGCCCCA ATCTCCACT CTTAAGCAAT CCTCCACCT  
CAGCCTCCTG AATAGCTGGG ATTACAGGTG TGCACTGCCA CACCCAGCTA ATTCTTTAA TTGTTTTAT TTTTAGTAGA  
GATGGAGTTT CGCTATGTTG TAAAGGCTGG TCTGGAAGT CTGGCCTCAA GCGATCCTCC CGCCTTGGCC TCTCAAAGT  
CTGGGGTTAC AGACGTGAGC CACCATGCTT GGGCTGCTC A

SEQ ID NO:1219: (Length of Sequence = 231 Nucleotides)

GTCTCTCTC CCTCCTCCC TTTATGGCA CTGCCCGAA CCAGGCAGCC AGCAGGGGAT GGGATCAGGA TGCAGTTGTC  
ATGGAACCG TTGGGGATCC ACAGGAACGA CATTACATA GGGACATTN TGAAAGCAA GCAAGAATGA NTGCTTTCCC  
GATCTCAGAC TGGCTGGATT CAGATCATG TTTGGCTGG TTCTATTTT AAGGGGTAAG CAGTTTGCTA T

SEQ ID NO:1220: (Length of Sequence = 409 Nucleotides)

AGTCACTCAG AAACCTACTT TGCTTACAGC CTCATTATG TTTTTGTAT TTGTTAAGAT ATTCCGTGTG ATGACATATT  
TGGCCTTAAA TTINCTAATT TTCTGGCCA TGCTTTCTT GTGATTGAA AATGTTACGG TAAGTGCTTA GTTTGGAAAC  
TATACTGTCA ACATATATTG CATTACTTCA GCAGAGCTGT AGTTCCATAA CATAATAAAA TGATGCTTTT TTTAATAAGA  
AGATCATACA CATTTCATTA TGCCCTAAAA GATGAACATT CAAAGTTCAC TTTCTCTTG TTTGATATG ACGGATATAT  
ATCAGTAAAA TAAAAATGC TGCAGNACCA ATATGCACTA ACTCAAACAT GCTGTGGATT TGTAGGGGCA CTGAGGTAGC  
AATGTCAAG

SEQ ID NO:1221: (Length of Sequence = 396 Nucleotides)

ATCTGAGATA CTTTGTCCTC ATGAATAAAT TAGTTAGTAG AATCTAATTT CTAGATCCTT CATAATGGTA ATTGAGGGTA  
AAAAATAATA ATGTAGTAGT CAATTTTAGC CCTTTAAACC TATGGGGAAC TGTATGAATA ACTGTTTGAA ACTGCAGGGT  
AATCCTGTCA CACTTGCAA CACATAGAAG CAACAAGACT ATTTCTCTC AACTTTTAA TTAATAAGT GCCTGAGTAG  
ACTTCCAGGG TAAGGTTTCA AATTTNCTT TCTAATTTCC CTGTTTAAAT GACCACTACT TTAAAGCTA TGCTGGGAAT  
TCATTTTCA ATATATCTAA CTTACAGGAA ATTTTGAAG AGCCTAAATG TCTATGGGTA GATTCAATGT TTCCTT

SEQ ID NO:1222: (Length of Sequence = 350 Nucleotides)

GTATTNTTT CTGGGTACTC TTCATGGCCT GCTAGAGAAC TTTACTAAAT TATAGTCCAG TAGCTGGACA GAGCTGCATG  
TGTATTGTCT AAGTCCACCT GTGCTGCTGG TCAAGATTAT TTTGCAGTGT TTGGTGGTGT TGAAGAGGAA TACTGTTGTG  
AAGGCTGAGT CAACTGCATG ACAATNCTCA TGGCTCACTG GCTGATGAGT TGTGGCATGA CTAGAAAGCT CTGCTTGTAT  
TCCCAGATGA CAAGTCACAC CTGAACAGCT GGATACTACT CGCATCCAAT TTGCTTCAA GTTAACATAT TTNCAGAAAA  
TATTTGGATT TGGAGTACAT ACAATATTT

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SEQ ID NO:1223: (Length of Sequence = 370 Nucleotides)

ATAAGCATAT GANTTTATCT ATAGGCCAAG TTAATGACAT AACTACAAAG AAATGACTTG TTTCACATGT TTAAACCAG  
 TGTTTTGGCT ATACTAAGTT AGTGAGACAT ATTCTAAAGA AAAATAGAGA CGCAAAGAAG ATCTTACACT TTAATAGTCA  
 ATTTTGTAGT TGTAATATT CTATCGATCA TTTTGTAACT CTCCTATATA GGGTGTAGGA TGGTGGAAAT AAGTAATTTT  
 NTTAATGTTG TTAGGAACCA AGGCTATCAG TGTAAAATGA AGGAGTTACA AGCATAAGAT TGANAGACGG TAAGTAAAAA  
 GCTCATTAGT ATAGTTCCAA GTTTAACTTG TCAGGGATGA GCTCATGATT

SEQ ID NO:1224: (Length of Sequence = 188 Nucleotides)

ACATGACCNA GGCTGACCA AATCAGACTA AATCCTANTA CCTATACCAG AGTTATTGAG AAAGATAAGN TTGGCCTGC  
 NGGCTTTGA CAGTGAAAGG NTNTAGGCTT TGGAGCTCCT CAGGGCCACT GCTTCAGGGA ACCTTGCTGA CAGTGAAGCC  
 AACACAGATG AAAGCAAGGC CAAACATT

SEQ ID NO:1225: (Length of Sequence = 353 Nucleotides)

CCCCAGCCAA GGGAGGCGT NAGTNAGTGT GGTACCCAGC GTGGGAAACC GTGCTTTTIN CCATGGENACT NTGCAACCCA  
 CGGATTAGAA GATCCCACTC AGGAACCCAC GNCCTGGNA CCTAGAATGC CAACCCAGGA GCTGCACAGA TTCTAAACAA  
 CCTCTCANCT GGAATCTGCC TAACCCTGCA GAGCTCCTGC GGGGAGGGGT GACCAGTGC ACANCTGCTG CTGCCTGCTG  
 CCTAAGCCAT TTAA

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CAAAAAGTTA GAAAAACATG TAAACGTAAG TNATGAGGTA TTTCATAGAT ACAGTGCCCA TACAAATNCT CTTTCCACA  
 ATTTTCAACT GCCAGATCTC TTGCTTTAGT CTTTTNCCT TATATTGGA GAAACAGAAG AGTTTGACAT AAAAGTCCCT  
 TTGAGGATGT GAGGGTTGCA GTAGTTTACA GCAGGGTCAG AAAATGAAAG TAATAAAGCA ATATTTACAT GTTTTGTAT  
 AAGACCAAAA ATATTTCTT AAAAAGTTGT TAAAGTTTT TTAGTCTAT AAACACTCAC TTTTATAGGG CACATGATTG  
 TCTGTGTGAC TTCTCTTCC AGAGGAGGAC TTT

SEQ ID NO:1227: (Length of Sequence = 352 Nucleotides)

GGCATCTGTT TTTTGTGTTG TTTTGAGATA GAGTCTCACT CTGTGCCCAG GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA  
 CTGCAATCTT TGCCCTCCCG GTTCAAGCGA TTCTCTGCC TCAGCCTCCC AAGTAGCTGG GAGGTGTGCA CGCCACCACA  
 CCCGGTAAT TTTNGTATTT TTTGTAGAGA TGGGGTTTCA CCATATTGGC AAGGATGGTC TCAATTTCTT GCGCTGTGA  
 ATCCGCCCCG CTCAGCCTCC CCAAGTGCTG GGATTCAGG CGTGACCAG GCGCCCGGCC GGNATCTGTA GATTTTAAAA  
 GGCCCCAGTG GTTCTNATGC ACACCCCCAG AG

SEQ ID NO:1228: (Length of Sequence = 387 Nucleotides)

AGTTTCCAA GATTGAGTGA CACTATTGTA ATGAGAATCT TCACTGGAGC ATCAGAAGAA CTGATTTCAA GCCAGTTTTG  
 TTGGTCAGCA CGGTCAAAC TTCAGAAGAA TCTTGTGCTC TGAGGCTTTC CAAAGCTTTG TTCCCAGGG CAGTAACAGC  
 TTCCAGTGTG GGCAGAGTCT TTAGTATTAT CACCAGGGCA GCTGCACTGT GGCTGTAGC CATCTTTCTC TTTTAGTACG  
 ATCCCACCTG TCAGACTTCT TGAATTGCA CTTCAAATTA GAGCCACAAT CAAATTATCA GTCACGNTGT TTATTTTGT  
 CACCAGAGAA AGGACAGAGT CTGTTTCAGC AGAGTTTGGG GCCAGTACT GATCTCTCTT CAGCAGG

SEQ ID NO:1229: (Length of Sequence = 366 Nucleotides)



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CTGATAAGGA GGTAAITTTCA TAGGAGCTGC TAAGATGGGC ATGAGGNTCA AACTGCAAAG CACCAACCAC CCCAACCAACC  
 TGCTGAAGGA ACTCAACAAG TGCCCGCTCT CAGAGACCAT GTGCGACGTC ACCATTGTGG TGGGGAGCCG CTCCTTCCCG  
 GCCCACAAGG CTGTGCTGGC CTGTGCAGCT GGCTACTTCC AGAACCTCTT CCTGAATACT GGGCTTGATG CTGCCAGGAC  
 CTATGTGGTG GACTTCATCA CCCCTGCCAA CTTTNAAGA GTTCTGAGCT TTGTCTACAC TTCAGAACTC TTCACAGACC  
 TGATCAATGT TGGGGTCATC TACGAGGTAG CTGAGCGTCT GGGTAT

SEQ ID NO:1230: (Length of Sequence = 343 Nucleotides)

AGTGGAGAGA AGCCCTATGA ATGTTTGTAG TGTGGGAAAT CGTTTTGCTG GAGCACAAC CTCATTGAC ATGCCATTAT  
 CCACACTGGA GAGAAGCCCT ATAAATGTAG TGAATGTGGA AAGGCCCTCA GTCCGAGCTC GTCCCTCACT CAGCATCAA  
 GGATGCATAC TGGGAAAAAT CCCATCAGTG TAACAGATGT GGAAGACCT TTTACAAGTG GACAAACCTC AGTTACCTT  
 CGAGAACTIN TTTTAGGGAA GGACTTTTGT AATGTAACCA CTGAGGCAA TATTTTCCA GAGGNAACAT CTTCTCTG  
 ATCTGATCAA CCATACCAA GAG

SEQ ID NO:1231: (Length of Sequence = 406 Nucleotides)

CTCTCGCCGG GCAGCTTGA GAAGGCGCAA TACTCTCCAG CTCCACCGTT ACTTCAGCAT GGCTGGGGAG GCCTTGAAA  
 ACTTATAATC ATGGTGAAG AGGAAGCAA CATGTCCTTC TTCACATGAC GGCAGGAAG AGAAGTGCTG AGCAAAGGA  
 GGAAAGCCC TTATAAAACC ATTAGATCTT GTGAGAACTC ACTATCATGA GAACAGCATG AAGGTAACCG CCCCATGATT  
 AANTTACCTC CCATGGGCTC CTCCCGCAA GACGTGGAGA TTATGGAAAC TACAACCTCA GATGAGATT NGGTGGGGAC  
 ATAGGCAAAC CATATCAATG TACATGTGTC TTTATGGTAG AATGATTTAT ATTACTTTAG GTATATAGCC AGTATTGGGA  
 ATTGCT

SEQ ID NO:1232: (Length of Sequence = 380 Nucleotides)

AGACCATCAA AGGCCAGAG GAGAGACTCT TGGGACAAAT AAATATTTAA AAGCAGTTGC CTATGAGAAA ATGGAAAAAG  
 CCACAAGCAA AGGTAAGATC CATGCTCCAA AAAGGCCCTGA GAAATCTTA AACCTTCTCC TCAGATTGAT CCCAAAGCTT  
 AGAACGAATA CCAAGATAAT AGCAAAAATC CTCCCTGGAA AAGAGTCAGT CTGCAAAAC CGGAAAAGGA GGTGTGTTTT  
 TCCACAATGC CTAATTTCTA ACAACAACAA CAAAACTCA GAAACATGG CCCAATAAGT GGAAGAAAAT AAAGTGACGG  
 AAACCTTCCC CGGAGGAAAC ATAAGCTTCA GGCAAACTAG ACAGATTTTA GACTGTCTAA

SEQ ID NO:1233: (Length of Sequence = 357 Nucleotides)

TTCAAAGTTT ATCACAACCA CCACCATCAA GACAGCAAAC CAAAGGGGCA TGGTAAAAGA AAGTTCCAGT GACTCTGGAT  
 TTGGTTCTAA TTTAATGCA ACTTCTTGAT TGAGTGCAAG GTGAGCACTA CTTGGAAGTG GCTTTGGCGT TTCANCGGTG  
 GGTAAATGGAG ACATTGCCAA ATTTATATTC TGTAATTTIN CGTTGGGTGA GGGGAGCATT ACATCATTTAT ATAATGGTAC  
 TTCCTCAAGT TGCTGGTCAT CAGTTTCTGT GTCGTTGCTG CCAAAATCTA AAGATATGAT TGTNTCTCCA GCGGCTGGGG  
 CCAGCAAAGT TAAAGCATCA GGTTCCTTCT TAAGTTT

SEQ ID NO:1234: (Length of Sequence = 313 Nucleotides)

CCAAGAAATC TTAATINCTT TATGTGTTGA CTTTTTGACT CAACAATTTT TTTAAACTT TTTGTTTTTT NCTGAAACGT  
 TCTTGTTGTT ATGAGCCTTT TGTGTTGINC TCGTTAAATG CACTCGACCC AAAATTGGTT TGGCATATCG AAAAGGAGAC  
 CAAGGAGGGA GGGGCTGGGG CGTGGGAGGT GGGGAGGAGG CCGAATGGA CAGAAAGTTG AGGATAAGAG AAGAGGAACA  
 TAGAGACAGC CAGAAAGACA TGGGGAAGG GTGTTGGAGA CAGAGAAAGG GGAAGGCAAG GGAAGCCAA AAG

SEQ ID NO:1235: (Length of Sequence = 386 Nucleotides)

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CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TTGINCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG  
 CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTIG TGA CTCTAAG CTCAGTGCTC TCTCCACTAC  
 CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA  
 TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCACCACCA TGCCTGGGTA ATTTTGTAT TTTTAGTAGA  
 CACGGTTTCA CCATGTTGGC CAGGCTGGTC TGGAACTTCT GAGTGTAAT GATCTGCCCA CCTTTG

SEQ ID NO:1236: (Length of Sequence = 401 Nucleotides)

AGGATGTACT TCTAGTAATG TCACTGAAAG CAGATATCAA AATTCATTAC CAGGAGTACT TTGCTGTGA ATGGTTCCTG  
 TGCCATACAG AGATAAGATG GAGTCTTTGG AAAGTTGTTT CTTTGCCACT TCTTCTGATT TTNTAGTTTG CTCAGTGAAT  
 AAATCTAGAT CCCAGATGT TACTGTAGAC AGGGTTGCAG CTGCTGGTGC AGAGGGTGTG CCTGTAGACA AACACCAAAA  
 TAAGCTATCA AATTCTGCAT AGTAAAGCGC ANTTAATCCA TTACTTAAAA TCCAAATAAA GTTATAAAAT TAGATAGGAA  
 TCAACAATT GTAGAAGTA AAATGGTGCC ATTCAAGAGG ATCACTTACA AGCCCAGCCC ATATAAAACC ATCTACAATC  
 A

SEQ ID NO:1237: (Length of Sequence = 372 Nucleotides)

TTAACTCTTT CTNCTCTCA GTCCGATTAT AGAGTTGGAG CAAATGTCAT GATGANCITT NAGGCCTAGG CCTGNCCTCT  
 TGAGGTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT TTCTTTCTCC ATAATAGTCC CAACCCTAAA CAGGGGTATG  
 GCACAGTACT TCTTATGAAC AAAAGTGCTA TTGGTCTACA AGGGGACTTG AGCCTGCACT AATTGTATTT GATTAGGATT  
 TTGTGCTGT CTGTATGATG TTTAACCACA CTGTCAATTA CAGACTTCCT TTAAGGAATT TCCAGGAAAC CCCCTTACCA  
 TAAGAGTTTA AATTAATAGT TTNCTAGTTT AATGACAGCA GTTGGTAAAG GA

SEQ ID NO:1238: (Length of Sequence = 304 Nucleotides)

GGACAAAATT CCAATTATTG TAAATGTAAA AGAAAAGACA ACAAATAA GCTAGAAAGA TGAAAGCTAA AAATTCTATT  
 TGAATATGT AAGATGATGA CAGATATTAA ACAGTAATTA GTCATGAAAC AATCATTTAA ATGCTTTTNC CAGGGGAATC  
 GCAGAAATTG AGACCCTCAA AGAGCATGCA AGCTAGTAGG GAGGCTGCGA CTCATACCTT TGAATCTTTC TGTTCTGCAA  
 ATTCTCAACT CTTACCAATT TAACTCTGCA GTACTGCTAT GGAAATTACA TAAGAGTAAA TTGG

SEQ ID NO:1239: (Length of Sequence = 389 Nucleotides)

TGTTATAACT GGCACITTA TTTGTTTTTG GAACTAGAAT TTAGGGGCAG TTGGATGAAA TTGCAAATTT AGAAGGGGAA  
 TAAGAATTTT CTAGTGCTAT ATAAAGAAAT GATGATGGAG ACAAAGCCT TGCTTCTCTC TTTTAGAAT TTATTTCGA  
 TTTTINAGCAT ACTGTGGGGC TTTTAGAGCT AATATGATCT AAATNCAGAA AATTTAATTT TCATAGTAGG CCAGGTGTGA  
 ATTACTTATG TTTGCTATAG AATGCTTATT TAGACTAACA ATAAATTTAC TTTGCTTTCT AAGGCCAGTC AGCGAATGTG  
 GGGATGAGGC AGGATGTTTT AAATGAGCCA GAGATGATCC NCAAGGGGAA CAGTCGACAC AGAGGTCTT

SEQ ID NO:1240: (Length of Sequence = 365 Nucleotides)

CTCCAGCCTG GCGACAGAG CAAGACTCCG TCTCAAAAA AAAAGCCTTC CTTGCCAGGT GAAAGCAAGA GTGGTATGGA  
 ACATTTATTT AAACATAAGA AGCAGAAGGT TCCTCCTCTT GCAAGTATGT TTTCTCTAAA TGTAGCATTT CCACTGGAGG  
 AGGTGGTCTG GGTGGATGGT TAATATGTGA GGATTGTNCA GCCAGGCAGA TAACCAGGCC TCTGCATATA CAGATACCCA  
 CAGCCCAGGA ATCTTGAGAA CTGAATGGCC CATAACAACC TCTGGCACTA TCGGAGCTGC AGGGAGGCTT GGCTGGGGCT  
 ACTCCAGTCT CAGGCCCTG TTTTATGCGG GAAGTCACAA GGAGG

SEQ ID NO:1241: (Length of Sequence = 350 Nucleotides)

GGGGAGGCGG TAGGGTCIGC NCTGTCTGTN AGGGGCTTGT GGCTTGGCGG GTGGGCTTTG CATGGTCTCG CCTCTTGAGT  
CCAGCCCOGT CCTGATGGGG CAGACTTCTG TNCGTNCTGC TTCTTGGGTG ATGTCAATAC TGAATGAGAG GGCAAGAGAA  
GGGGAAGGG AACCGCCCAT ATGTNCTTCA CGTGTGCAA GGGGGCTGTN TGGTTCCTAT GAAATGGTCA GCAGAGACTT  
TGGGATGGGT ATGACTCGTG GGTACAGGG TTGACTAGAC AGAATCTAAA GAAGGTGGGT GCTTAGCTNG GAAGTCTTCA  
GTAGGAACGG ATCACTGTGA AGCTCTAGGG

SEQ ID NO:1242: (Length of Sequence = 392 Nucleotides)

CTCTTACGAG TGAGGTAAAG TATTGAACAG ATATTTAAAA GCTATAAGCT TTAAACAGA ATAGGCATAT TGCTGATACC  
AGTATTTGAC AACCGCCTTG TTTTTCAGA TAAGAAACT GAAGCACAGA GACCATAAGG CATCAGCCTA TGGTCATTCA  
CTTCGTGGTA GTCAGGTGG AGGTACACC AAGGCCCTCT GGCTACTGAT AATCTCTGTA CTAGGCTGCT TTTCAGTAAA  
CTCTTGAATG AATGAAAGAA AGAACACATA CTGTTGACTT TTGAACCTGA ATCTAAACAA AACCTATGTT GAACTTTAAG  
TCTGTAATCT AAGAACTATC AAACITAAAC TTGTACAAA AGGNGGTGAT GAGCACAACC ACTTTCITTT GG

SEQ ID NO:1243: (Length of Sequence = 377 Nucleotides)

GTGGGGCAGG CGTGAGGTAG GGGTGGGGTG GGGATGACAG TCAACACAGC TTGGACCAGA AGCCCATGGC GCCTGNTCC  
CTGGAAAGGC ACAGGGCACA GACGGATGCC GCCTTNTTG CTGGGACACT CCTGCCACCA TCCACAGCTC CCCCCTCACT  
CCACGTTCTT GTACTTGGTG AACAGGTGT AAAGAACCCT CAGGGTGGAT TTNAGGTCCA AGTTAACCAC GTCTTCAGGA  
CGAGCCTTGG GTTNTTNAG GCCTCGTCC AGCATCAGCT CAAAGGCGAA GGACACATN TGGACCTTCT GATCGAAGCT  
TTCCGGAGTC AGGTAGAAGT GGTGGAGAGG AACAAAGTAG TCTTCCAGAA GGCCCAT

SEQ ID NO:1244: (Length of Sequence = 312 Nucleotides)

ATTTTNCAT CAATGTTTAT CAAGGATATT GGTCTAAAAT NCTCTTTTC AGTTGGGTCT CTGCCAGGCT TTGGTATCAG  
GATGATGCTG GCCTCATAAA ATGAGTTAGG GAGGATCCC TCTTTNCTA TTGATTGGAA TAGTTTCAGA AGGAATGGTA  
CCAGCTCCTC CTGTACCTC TGGTAGAATT CGGCTGTGAA TCCATCTGGT CCTGGACTTT TTTTTCGTG GTAAGCTATT  
GATTATTGCC TCAATTTTCA AGCCTGTTGT AGGTCTATTC AGAGATTCAA CTCTTCTG TTTTAGTCTT GG

SEQ ID NO:1245: (Length of Sequence = 320 Nucleotides)

GGAGATCGTG CACATCCAGG CCGGCCAGTG CGGCAACCAG ATCGGGCCA AGTTCTGGGA AGTCATCAGT GATGAGCATG  
GCATCGACCC CAGCGGCAAC TACGTGGGCG ACTCGGACTT GCAGCTGGAG CGGATCAGCG TCTACTACAA CGAGGCCTCT  
TCTCACAAGT ACGTGCCTCG AGCCATTCTG GTGGACCTGG AACCGGAAC CATGGACAGT GTCGCTCAG GGGCCTTTGG  
ACATCTCTC AGGCCTGACA ATTTTCATCTT TGGTCAGAGT NGGGCCGGCA ACAACTGGGC CAAGGGTCAC TACACGGAGG

SEQ ID NO:1246: (Length of Sequence = 275 Nucleotides)

TTTTTTTTT TTTTTTTTT ATCTGACAGC AATAGATTTA TTAAGTATCC CGAAAATAT AAACACAAAC CAGTAAAAA  
CAAAACCGTA AAACGTCAGG CCTGGAGCTG CAATAAGACA GAGACAGGAG CAGCTCACAC GTGGCCTAGG TGGGGAGGAC  
GAGGCCATAA ATACTGCAGG AGGGCGGCAA GGGAGCCCTA GGGCGAGGGG AAAGCAGGGT NTCGGCAGCG AGATGGCTCC  
GGGGGTTAG AACTGCTGG CTTCGGCCCC GCGCG

SEQ ID NO:1247: (Length of Sequence = 384 Nucleotides)

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GGTCTTGCCG GAGAAGTACC CCCCTCCAAC CGAACITTTG GACCTGCAGC CCTTGCCCGT NTCTGCTCTG AGAAACAGTG  
 CCTTTNAGAG TCTTTACCAA GATAAATTTT CTTTCTTCAA TCCCATCCAG ACCCAGGTGT TTAACACTGT ATACAACAGT  
 GACGACAACG TGTITGTGGG GGCCCCCAGG GGCAGCGGGA AGACTATTTG TGCAGAGTTT GCCATCCTGC GAATGCTNGC  
 TGCAGAGCTC GGAGGGNCGC TGTGTGTACA TCACCCCAT GGAGGCCCTG GCAGAGCAAG GTATACATGG ACTGGTACGA  
 GAAGTINCAG GACAGGNTCA ACAAGAAGGT GGTACTNCTG GACAGNCGAG ACCAGCACAG ACCT

SEQ ID NO:1248: (Length of Sequence = 225 Nucleotides)

AAITTTGGAGA AGATAGAAGT TTGAAGTGA AACTTGAAG ACAGAAGCAC GGAAGGCGA AGAAAAGAAT AGAGAAGATA  
 GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAAA GATAAATTTA AACCTGAAAA GTAGGAAGCA GAAGAAAAAA  
 GACAAGCTAG GAAACAAAAA GCTAAGGGCA AAATGTACAA ACTTAGAAGA AAATTGGAAG ATAGA

SEQ ID NO:1249: (Length of Sequence = 393 Nucleotides)

CATCTATAGT CCATACATAT CTATAATGGA CAGAAATATG AGAATGAATA AGCAAAGATA CTTATGTACA CCAATAATAA  
 AGTAAGAAAG GTAAAAAAT TCATGTAATA AGAAAAATA ACAACCCAGA AATTTAAGAN TTAAGTAGTA GTCAAATCTA  
 ATTGGAATAA CTCACCTATA TAAANACAA GAGGAAGGAA ACTTTATACA TAGGTCTGGA AAATATCACA ACTATGTTCC  
 CAGAAGANTG TTTATCTCCA CAGCATCCAA CCTAGTGTCA TGCACACAGT TGGGACTCAG CCACTGTGTG CTGATTGATT  
 ATGAAGNCAG TCACTGTGAT CAACCAACA GTAATTGAAC GTTCATTTTT AATANGGTCA GTGTTAAATC TGT

SEQ ID NO:1250: (Length of Sequence = 391 Nucleotides)

CGTATGTATC TTINATTTAC ACTGCACACC TTGCAGCATC CTTACCTTGC AGAGTACTGA GTCCTGGCTT CATGAATTTN  
 ATGTCAAGTA AATGGGTTTT AGTCATCCCT AGTTCATGTG CATGTNCCGA GAAAAAGGGG AGCTTCTAAA ACATGTGCGC  
 AAACACAGG AACAGTGCA ATCCTGTGTG TCTCTATTG CACTTACTCC TCAAGGCCCC AAGGTAGGAC GCATGTTTGG  
 TGGCTTTCTG GCTTACAAGT TCCAGTGCCT ACTCCATTG CCTCAGAGGT TTGCTGTGAT CACTGAGGGG AAGCAGAATG  
 GAGCATCGTG TGTTCCTTAC TGGAGGACTC CTGCAGCAC CTGAAACAAC CCAATGTTGT TAGAGGCAAA T

SEQ ID NO:1251: (Length of Sequence = 320 Nucleotides)

GCCTCANAAG GTCCTTCCCA GGCTTCTCGC AAAGGAAGGC ACTGCCTCTN CACACCTTGT GAAACCTTTC CAGGACCTCC  
 CAGTCAGAGG CGTCTGGTT CTCACGTGCT GCAGAGCGCC CTACAGCCTG TCTGTGGGTG AGCGTGTCTG TNAACTCTTG  
 TCCATCTCTT CTGTGATCTG TGTGCTCCTC GAAATAACTG ATTTTNTCTC ATACACCTTG GAATCCTGAG TCCACAGAAC  
 AGAGGCTCAT ACAAGGAAG CTTTCAAAGA GTGCTCATCG ATTTCTAGGN TTCTTGAAGA CAGGCACCAN GTTTTGTCT

SEQ ID NO:1252: (Length of Sequence = 367 Nucleotides)

CAAAAAACA AAACAGTTA TGCAAAAACA AGAGTACAAA ATGCCCTTT CTGAAGCTCA GTTTGAGAAA CTGATTTGCGN  
 ATCTAGCTTA TTGATTATAC TCAGTTTCAA TTCCTCCTGT GCAATAATA CATAAAGTCA TTAATGATGA TTTGATGANC  
 TGAAATCATC TTCGCTTAGG ATCGTTTGAC ATCATAACCC AAATATAAAA AAGTTATTCA AGATTACAG AGATAAAAA  
 GTGCCTCGGA AACATAATTC ACCCATGTAT ATATAATANT TTINGAACAT ACTTTTTAAA CATAAATCA CAGTCAAGGC  
 AGTGATAGCA TTGCATACTC AGTGCAATTAT TTCATGTAGT GCCTTCC

SEQ ID NO:1253: (Length of Sequence = 393 Nucleotides)

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TTGCTTTCAA GACAACACTC AGTTGCTAAA CCCATTTCCT TTTCCTTAGG ATATTTTCAT TGTCTCCGAA TTTTAGAGCT  
 GAAAAGTGCC TTAGAGATCA TCTAGTTCAA CCTCTCCGTT CAAATGGAGA ACCTGAGCCA CTAAGNITCA CAGGNGAGTA  
 AGATAATTGA GCAAACAACCT CCAAGTAATG ACAGAAAATT ATAGGAGAAT CAGTACAAAC TGTGAGAATT TACTATGTTG  
 TTAGCATCCT AAGTATGAGT TTAGAAAAGG TAGAAGTTAT AAGAAAAGTT AAATTGTTTT AATATGAATG GGATTCCACT  
 GTTACCTTCA NGNTAAAATG GAGACATACT TTTTNCCTTA GGTATTATAG TTAAACGAAT ATTGTATCCN GTG

SEQ ID NO:1254: (Length of Sequence = 377 Nucleotides)

CAAAAGCAAG GAGATGAGTT GAAAGACAGT TTTCCTTTAA GTTCATCAGTA TGGGATGTCA GCAGAACAAA AATTAAAAAG  
 ATTAATTINC CTTTGTGATCT AAAACTTCCT TAGTTTGAGC AGTAGGTGCT ACAAATTTAT TTACATATCT TAGTATCATA  
 GTTAAATGTA ATGTGTTTAG GAGAGGAAAA CAAAGATAC ATTTCCTTTA AATTCATTAA GAAATTTTCA AATTCACTTT  
 GTAGCCCATG CTGNATAGAA TTGGGCTGTG TTGGTACATT TGAAACACTG TTTATGTTGC TTGAAACACT TATTNTTTTA  
 ATCGCCGATG TGATGATGCC TATGGCCGAG ATCANATATA GCTAGATTGG CTAGGCT

SEQ ID NO:1255: (Length of Sequence = 307 Nucleotides)

ACAAATGTTA GCTTCTCTG GCCTAGAAAA AGAATAGGNT CATCAAGTCA TAAAACGAAG TATGTNATTT CAGCACCTCC  
 ACAAATGGC TTCATCAAAG AAGAGAATCC CATCACATGT TACCTCTCCT CTCTAGGTTT TCCAGCTGGG GCTTTGCCTG  
 CCCCTCTACC TATGGCAGAA CCCACTGACT CGTGGNCTTT CCAGCACTTC CACTTGCCCTC CATTAGACAC TTAACCCCGC  
 TGNCCTGTC CTCATGCCAG GGAGGGCCAA TCTCCAGNCA ATGCTNCTGC TGGCTGTATG ATGACTG

SEQ ID NO:1256: (Length of Sequence = 326 Nucleotides)

TTGAGAAAAC TGCAGAAGCT GGAAGGTCAA TCTCTGACCT TCTTCTTGA GACACCTTCA TGTGACAGGT GTCCCACTTT  
 ATGCTGGAG GGAAGGAATG ATAACACAAA GATACCAAGA AGAATGTGAA GAGACCTTTC TCAGTTCCCC CCAGTTCAAG  
 ACCATTATAT CGTACCCACT TTGTCTAAT CANGCTCTA TATGACTATC CATTCTTTAT CAAACTAAA CATAGAAATA  
 TACGATTATC TCAATTTCTG TCTTTGNTTC TGAAGGCTCC TGTGTACAT AAAACTTACA TTAAATAAAT TTGTATGTCT  
 CTCCTG

SEQ ID NO:1257: (Length of Sequence = 224 Nucleotides)

TTTTTINAGA GGGATTCTCA CACAGTCACC CAGGCTGGAG TNCAGTGGCG TNATCTTGGT TCAGTCAAC CCCTGCCINC  
 NGGTTTCAAG CGATTCTCCT GCCTCAACCT CTCGAGTAGC TGGGACTACA GGCACCTGCC ACCATGCCCA GCTGATTTTC  
 CTGTTTINAG TAGAGACGTT GGCCAGGCTG GTCTCTTAAC TCCTGACCTC AGGTGATCTG CCCC

SEQ ID NO:1258: (Length of Sequence = 329 Nucleotides)

CAGGGGTTTC TTCCCTACC CTTGTGAAA ACCAATCAAT TACTAGATGA GTGGATGGAT GCAGAAAAAT CTGGGCTGAG  
 CCAAAGTCCC TTTTGGAAT ACAAGCCATA ACATTGGAAG GACATCAGCG ACCTTGGCTT GTTTAGGTGA TTTTNCCTCC  
 AGCTGCAGGT AGTCTTGACA AGGAGCGTTT AANCAGAAGG CTCAAGATGC ATTCTTGTG TAGGTGGGNG AGAGCACTTC  
 TAATGTAAAG TGGGGTACAG NTCAGCTGCC CCCCCACGTA GCCTGGACAT CGTCTTNTCC CCATAATCCT TNNCATCCCT  
 ACAAGGTCC

SEQ ID NO:1259: (Length of Sequence = 374 Nucleotides)

GGTCATATGT TACATGCATG TTGTINCAAT ATGTGTATGT CAGGNCCATC TTCACAAAT TNCATAGCCC CTTCTGTGAT  
 CTGTTAAATA GGTATATTTA GCCAACCTC TCAGCATAAA GTCCTACCC CAGCTGCTCC CCCTTCCAAG TGCTGCATC

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TGCTCTGGC TGGGAGCTCG CTTCCAGCC TGTAGGATGG CCACCTTGAA GGCTGTAACC CTTTAGAAGA AATAAAGTCT  
CCTTTTCTAA ATTTATAGAT TGTATGATTG TTTAAGCTA ACAATAGCAA TGGCATTATC ACCTCAGTTT CTGTGTGTGT  
GCTTAGCATA GTACCTGACA CATGGCAGTT GAGTTGGTAG CTATTTTTTA ATAT

SEQ ID NO:1260: (Length of Sequence = 353 Nucleotides)

CTCAGTCAAA AATAGCAGCT GCTGAATTAG CATGGGCATA CCAGGCAAAT AAGCCTGCAT TGTATAGCG TTCCCTTGAT  
TGCNCTATGA AACTGAGTAA AGTTTCATTT CTTGATTCAA GAATTGCAGC TAAAATATCC TCTGGACAAA GAAGAAGGGA  
AATTTTTTGA TAACAGATGT GTTGACTCCT TACAGTATAA AGCCAATTTT TGTATATCT CACCAACAAT CCTGGTTTCT  
ACAGTACATC AATTTTAAAGT AATGTGCCAA ATCATGGCAG CAAAAATATG TTCCCTCTAG CTGTTAGGGA CTTTGACTTG  
NAAAACAGGN GTTTCAAATC ATCTTCTTCA TTT

SEQ ID NO:1261: (Length of Sequence = 294 Nucleotides)

TTAAACAGA CAGCTAAGAT TATAGGAATA TTTAAATAA ACAGCATTTA TTTTAGACAC ATTTCAAATA GAAGCCACAA  
TAATCAAATA GATATTATCT GAAAACGTTT CAAAAATATT AACCCCTTAA ATGTTCTTCT CTGAAAAAT AGTTTATCTT  
TAACAAATTA TTCTGAATTA TTGTGTCAAC ATATAAGGTT ATGCATATAT ATNCACTTGC TGGTCTCTAT GTTAAAGCAA  
ACTAGGTAAA AACTAGAGGA AATATCTGGA NCATAAATG GTTAACAATT TACG

SEQ ID NO:1262: (Length of Sequence = 292 Nucleotides)

ATGATGAAGG GTTGGAGTGA TGCACCTAGA AGTGAAGGAA TGCCAATGGT TGCCAGCAA GCACCAGAAA CTAGGGAGAA  
ACAAGGAAGG ATTCTNCCAC AGTTTCAGAG GGAGAATGGC CTTGCCAACA CTGTGATTTT GGACTTCTGG CCTCCAAAC  
TATGAGACAA TAAATNCCG TTGTCTTAGA CCACCCAGTT TGTGGAATTT TTTTACAGCA GAACTAGGNA ACAAATACAG  
TTTTTTTTTG CAGTAAAGAA GTTTTAAATC TGGGTATGT CCAATGTATC AA

SEQ ID NO:1263: (Length of Sequence = 303 Nucleotides)

GGTTGAGGTT GTGGGTAGGA TGAGAAGACG ACAGGATGAA TCTTACCCCC CAGCTTTAGT GGAATTCTGT GAAACACCTG  
GGAATGTGTT AGCATCAGGA GAATTCCTCT AAGGTATGAA GAATGACAAC CTGGGACCTT TCTGTAGGT GGCTCTGAAC  
CTAACTATTC CCCAAGATT CCCAAGTGGT AGGAAGGAGG GGGTGCAGAG GGATATTAAT CATGGTCATT AAGTCTCAA  
ACATTTCTAC TTCAAGTGAA TACATTAACC ATGCTGAGGC AGTTGAACAA CTGAATGCGT AGT

SEQ ID NO:1264: (Length of Sequence = 313 Nucleotides)

GGGACTACAT CAAGCACCTG CGGACATCT GCGAGGGCTA CGTCCGGCAG TGCCGCAAGC GCGCAGACAT GTTCAGCGAG  
GAGCAGCTGC GTACCATCTT CGGGAACATC GAGGACATCT ACCGCTGCCA GAAGGCCTTC GTGAAGGCC TGGAGCAGAG  
GTTCAACCGC GAGCGCCAC ACCTGAGCGA GCTGGGTGCC TGCTTNTGAG AGCATCAAGC CGACTTNCAG ATCTACTCGG  
AGTACTGCAA TAACCACCCC AACGCCTGCN TNGAGCTCTC CCGGCTTACC AAGCTCAGCA AGTACGTGTA CTT

SEQ ID NO:1265: (Length of Sequence = 290 Nucleotides)

TTTCTATGTG TAAGAGAAAA TAGAGATGGG TATACATACT GTTGTTTTTT TTGAGCCGAG AAACGTGTGT ACCGGGGCCT  
CAGGTGGTGG GCATGTGGGG CTCTCTTGC AGATGCCCAT TGGCATCACC GGTGCAGCCA TTGGTGGCAG CCGGTACCG  
TCCTTTNTTG TTCAACATAG GTTAGGTGGC AGCCACGGGT CCAACTCGCT TGAGGCTGGG CCCTGGGCGC TCCATTTTNT  
NTCCAGGAG CATNTGGTTC TTGCGGGGA CCCACGCAGC CCTGAGGATT

SEQ ID NO:1266: (Length of Sequence = 322 Nucleotides)

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CGGACAGATG TCACTCTCGC CCGAGAAGGG GGACACTGTG ATGGTGTCTT TAAGCTCATA GAGTGGCAGG TTGTCTGAAA  
 TGCCACCATC CACGTAGCGC ACCCCCTGGA GGGAGGGAGG GATGAGCCCA CAGTACACGG GGATGAAACC NCTGCAGACA  
 TTGGCCCTGGA TGAGCTCGTC CTGGGAGTTN AAGTGGGATA TAATGACATT NTCGCCGTCT GACACGCGGG TCAGGGAGAT  
 GCCCAGGCGC CCACTGGCAT GCTCATGGCT ATCAGCAGGC AGGACCTTNA GCAGGAAACT CGGGATGATC TTTTACCAGG  
 TT

SEQ ID NO:1267: (Length of Sequence = 310 Nucleotides)

GTAACCCATC CCATAGGGTT GINCTATGTA TTCTTGCCAG GTGGGGTTGG AGCACCTTGT GAGCTCAGCA GCCCAACATC  
 GATAGTAAGG GAGTCAGGGT TTCTTCATCT TCCCTAGAGT TAGAACTCAC TTCTACAGCC ACTGTGTCAG GGACCACTTT  
 GAGCGCCCTT GGCACCTGCT GGCTGGAAAT CAATTTAGCT GTAATGGATC TGGCCCAGCT TTTCTCTCTT TGGGTCATCT  
 GCACTCATAG TGGTTGAAGC AAGATCTACC AGATGGGGAC ATTGAGATGG TCCCTTTCTC CTTCTCATTT

SEQ ID NO:1268: (Length of Sequence = 338 Nucleotides)

GGGCTGCTCG TGAGGATGGG ACAGCATTGA CTTACTGGGG AGACTCCCTT GATGACAGCC TTACACGGTT ATTCATAAGG  
 AGGCAGGAAG AGGCGCTAAC AGTAAGCATG TTCTGGGTGG TCTTGGGGT GCACATGTGC AGCAGCTGTA CCTGCTTGCT  
 TGTATGTTAC ATGTCTCATT AACATCTGAA ATCTCCACCC GGGAGTGTGT TTTTINACTAT TATAATGAGC AAAGGTTTCAG  
 TCTGAGGACA GGTAAATCA AAAATGTGCA CCCTCTTACG GGGGAAATTC CTTACTGGAG CTAGTTTGGC TTGAAGNGAA  
 CTGGACTACA GTGTGAAT

SEQ ID NO:1269: (Length of Sequence = 363 Nucleotides)

CTGCTAGAGA GTATTTTCAGG GTCTGCAGCA TGTGTGTAAG GCCATTAAGC ATATGTTAAG GCCATTAAGA GCAGTAATTA  
 TAAAAGGGCC CTGCTAAAAT AAATATCAAG TTCCCTTAAG AAACCTTCAA ATTATGAAAG TTTTCAGTCA TTATTTTGCT  
 ACAATGANC TTAGCAGCTA AGNAAAATGT CTGCCCTGCTT ATAAACTTAA TATGGTATAA TTATATATTN CTNTTATGTA  
 TTTCTAAAGC TACATTTTCA CCTTAACCTT ACTACAAAGT AGTTTCGGGA AACAAAGTAA AAGCAGGGGN AATCCAACCT  
 CAAATATAAT CAAATATAT

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GATAAGTGAG ACTAATGGAA TCGTTTCCCT CTAACCTCAT AAAAACTTTA AGGATTATCT TTCTTGAGTT CTCGTATTT  
 CTGTTTITAGA AGAAAAGAAC AAAATTTCAG AAACAAGATT ATAGTGCTTT TNCATAAGTA TAAATACGTG GGCCCTATAC  
 AAACITGGCAA ATTCATTAGT CTTAAAGCAG ACATCCAAGC TATTGTGGGT GTTTGGATGA CACCATTTTC ACAGTAGGAA  
 ATCAATTCAT TCTGAGCGTG GGAATCGGCA TTGGTTAAGC CATGAGGTTT TATGTGGTAT AAACACCTGG GAAGTGAGAG  
 AAAAGNCAGC ACAGAAGCTC TGTGGGAGCT CTTCTGAGCA TTG

SEQ ID NO:1271: (Length of Sequence = 335 Nucleotides)

ATGCCCTCTGG CTGTTTGAC TGCAAAAGGT GATGTGCAGG GGTAGAGGTA GGGTACTAAT TTACAGTCAC CAAAATTAGT  
 ACTGATATTA ATCAGTTTAG TTGGATTAG ATGAACAATG TTTAATGCTT TAAGGNTCAT TTTTGGCCCC AACAGGACTG  
 TGCTATATTA AATGACACCG TGCCCAAAAG CTCAAAAATT ACATAGAAAG TAAAGTACTT CTGAATACT AAAACAGTTA  
 AGCATAAAG GTGTGAATT GGTCCCAAAG TGATATTAC TTAAACATTT AATCCTACGN NCTATCTTAG CTGTACCCCTC  
 TAAAAATGCT TAGGA

SEQ ID NO:1272: (Length of Sequence = 323 Nucleotides)

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GTTTTAGATA TTTTAAGATA TTAACTGTC CCTGTGGCT TTTAAGGAAA AAATAAGTAT AAATNCTTGA ATATTAAGAN  
 TTTTAAATCA GCTAAATTCA GGGCCAAGAA CTATTTAAGA TGATTCANTG AGAAAGAAAA GGACCTAACC TGGAAAAAGA  
 GTTTCAAATA TGCCAGTACG TAGGGTATTT NTGGAAATAC ACAGTCTAAA ATTAAAAATT NNAACTNATC AATGGAATTT  
 AAATCTATAG CACTTTAAGG CTGTGGAGCC CAACANTAGG GGNTACTTTG GGGGCACATG ATCTTTCAAA ACATAAATTA  
 GGG

SEQ ID NO:1273: (Length of Sequence = 368 Nucleotides)

GCAGCCTGGG CAACAAAGCG AAACCCTGAC TCAAAAAAAA AAAAAAAA AAAGTCTCTT AATCACAACA GCAAGCTCC  
 AAAAGTTCAA GCATCACAGG TAGCTAGTGG CTACTATATA GGNCAGCACA GACACAGAAC GTTTCCAACA TCACACACAG  
 TTCTANTGGG TAGCAATGAC CTATACTGCT GACCATGCTG NCCAACATGT NTGCAGCAGT CCTCATCCC TCTGTINGTCC  
 CCTGTTACAA GCTTAGANCC CCTCCNNAC GCTCCTCCCC CATAAACAGG GCAAGTNGGG CAGAAGGTGG AATCCTTTTC  
 AGGGGGCAAA T

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GCAATGGGAT CTGGAGCCAA AGAAAAATAT ATCTGAGTTC TAGCTCCTCA CTAAGTAACT GTGTGATAAT GGGTATGTCA  
 CTCACCTCTT TCCAGCTTTG GGTCTTTTAT GTGTAAAGG GAAAAACATA TGCCTACATC ATAAGGCAGA TGTGAACATC  
 AAATGTTATC AGTAACTGTC AATCTGTTTT ATTAATTGTA GAATGTCCAA AATATTAGTT TGTATGGACT TCAATGAGTA  
 TGTTFGTGG AGTGGAGTGG GGGAAAGGGA TCATTGCTTA CCTCTGCAC ATATCATGTT TCAGCCTAGT ACAAGGCAGC  
 CATGAGCACA AAGGGCTAAG CTACTTAAAT CAGNCCCCAA ACPACTTC

SEQ ID NO:1275: (Length of Sequence = 319 Nucleotides)

AGATTACTCT TTGCAGAAAT TTGGTTAATT GTGAAGCTGA AATATCCTGA CTCTACCTCA AAGTTAATGT TTTAGGTAAC  
 TGAACAGGTA TTCTNCCCAT TACTAGTATT GAAGTCAGAA TACAGAAACA AATAGTTACT GCCAGAAGCA GAATGGAAGA  
 GCCAAAAAGT ACACAAAATG GACGCCATAA ATNCTGAAAT AAAAGTGTAT GATGTGTTCT GAGTCACTGT AGAAGTCATG  
 CATTTATTAT CAAGATAGAA AAGAGCAGAG AATGACGTGG GACATTGGTC CTCGGAGGGC TTCGTANGTG GTTCGGTCC

SEQ ID NO:1276: (Length of Sequence = 324 Nucleotides)

CTGCAATTGG CAGGACAAAA CCTGCCAGAT TCAGAAGGTC ACGANTCATC TGGCCTTTAA TGCTGATATC CAGTGGAGAG  
 CTGGAGTGGG GGCTTGGGGA AATATTGACT TCAGGACCC AGGGCTTGAG GTTTTCTNCT AGCATGATGT CAAAACCAA  
 GAGTTCATGG CAGCTATAGG GCGTGCAC ATACATCTTG AGCAGGCTGG TCACATAGGG CTCTGACGAG ATGATAGTTT  
 TGACAACAAC ATCCTTTATC TTCTCCAGA TGGGTGCTGCT ATTGATTNCC CTTCTGGGCT CAGGTAGTTC CACAAAAGCC  
 TTCA

SEQ ID NO:1277: (Length of Sequence = 388 Nucleotides)

AGCAAGGCGG TGGGGTAAGT NTGGACCTTT GTGTACCAGA GAGAACATCA TGGTGGCTTT CAAAGGGGTC TGGACTCAAG  
 CTTTCTGGAA AGCAGTCACA GCGGAATTTT TGGCCATGCT TATTTTTNTN CTCCTCAGCC TGGGATCCAC CATCAACTGG  
 GGTGGAACAG AAAAGCCTTT ACCGGTCGAC ATGGTTCINA TCTCCCTTTG CTTTGGACTC AGCATTGCAA CCATGGTGCA  
 GTGCTTTGGC CATATCAGCG GTGGCCACAT CAACCTGCA GTGACTTTGG CCATGGTGTG CACCAGGAAG ATCAGCATCG  
 CCAAGTCTGT CTTCTACATC GCAGCCCACT GCCTGGGGGC CATCATTTNG AGCAGGAATC CTCTATCT

SEQ ID NO:1278: (Length of Sequence = 354 Nucleotides)



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GGACTTGTAC CCTGGGTGGT GAGAAGACCC TGATTGGTTT TATTAGTGCA TTTCTGTAAG TNACTGGGAT AATCATGTTT  
 AGTTCAGCAT TTTATGTGAG TTTCTGAAAG CNCTTTAATC AACTCCATAG ACAAGATTAT AGTGTGTCAC AGCAATAGGC  
 ATGGGCCATG TCTGCACTGG AGGTAAGTTG CAAGGTACAC CCACGGGTGA TTTATCACTC TTACAAAGAT GATAACTAAT  
 GAAGACCGCA TCTAGAATGC TCTTACTGGA GATGGTTTAC AGAGCATTIT TAATCATCAT ACTTAGAITT ATATTAATAT  
 TTCTTTTCAA ACTAAATTAT TCCAACTGT GCCC

SEQ ID NO:1279: (Length of Sequence = 347 Nucleotides)

CCACTTCAGT GCTTCTGTGT CCCGAAAAGA TCTTTTGACG CATAGGGCCT AACTGTAATA CACTTAAAGG ATAAGTCTCC  
 ACCCCAAGGT GAACATGGGT CATGTGTAC ACGCACATTA GTTCATTATC CATGTGTGAG GACCTCCTTT GTGAACAGTC  
 ACAGCTCCTC CTATAACCTG TTAAATATGT ATGTTTGATC AACCCATTCA ACTTAAATNC TTGTCTTACC TCTCCTTCCC  
 TCAAAGTGCC TGGCTATACT TCCCAGCCTG CGGGATGGCC ACCTTGCAGG ATGGAACCCT TTGTAAGAAA TAAAGTCTCC  
 TTCCAAATG TACACATTGT ATGACTT

SEQ ID NO:1280: (Length of Sequence = 344 Nucleotides)

ATCCTTAGCA TGCTGINTT ACTGAGACCA TAAACTTTTT TTTTTTCCTT CTGCCCTCAC CCAGTGTGTG TTAAGTCTTG  
 CTGTTAAGC TCCCACACTT AAATGGCTGC TTGCAGAATT GCAAAGGGAC TAGGGAGAGA ACAAAAACAG ATATGCAGGT  
 GGTTGTTTGT AACCAGACAG GATTTCTAAG GAGGGTTCAG GCAGTCAAGT GGTITTTTGT ATGTTTTTTA TGTTCATAGT  
 TTTGAGTTTT ACAATGTGTG AAGCTTACTT TTGCTAGCAT TAGGTATAGT TTATTTTGAA AGAATGAGGC TCCTGAAAAAT  
 AAACATGCCC AGTAACTAT ATCT

SEQ ID NO:1281: (Length of Sequence = 331 Nucleotides)

TGAGGAACAT AAAATGGCTT GGTAAAAGTA ATAAATCAG TACAATCACT AACTTTTCCTT TGTACATATT ATTTGTCAGT  
 ATAGATGAAT ATTACTAATC AGTTTGATTA TNCCTAGAGG GTGCTGCTCT TTAATGAAAA TGAAAATTAT AGCTAATGTT  
 TTCCCTCAA ACTCTGCTTT CIGTAACCAA TCAGTGTITT AATGTTTGTG TGTNCTTCAT AAAATTTAAA TACAATTGCG  
 TATCTGTTTT CCAATGTTAG TATGTATGTA AACATGNTAG TACAGCCATT TTTTTCATAT GTGGAGTAAA AATAAAATTA  
 GTATTTTTAA A

SEQ ID NO:1282: (Length of Sequence = 310 Nucleotides)

CCATGTCAA TGTAGTTTAC AAAGGGAAAG GACAAGTACC TTNTATAGA ATATACAGAC ACAGCATCAC ACCACAGGGC  
 CCACGGGAGG GTCGGGGAGA CGACACTTTT TCCCTGGGAA AGGCAGCTCT AATCCCAGGA ATGGTTCTCN GCAGAGGCTG  
 GGTCGCCAGG AGCACTGTCC TCTAGCCCCC TAACTCAGCC TCTGCTTCAN CTGGTTCCC ATTTCTGCCC TCTACCCCCC  
 AACTCCTTAT AAAGAGCCCC ATGAGCTAAG ACTAAGGAGA GGTTCATNTC CCTTGGGGCG TGTGCCCCAT

SEQ ID NO:1283: (Length of Sequence = 323 Nucleotides)

ATGAGGATTA ATTATATCTG TNCACCCAC ACAGCTCCCC CATACCCATA ATCTTTATTT ATTINCTTCG TTTCTTCCTT  
 ATACCTTGTT TCAGGCATTA AACCATAACC TGTATTTTAT NCTATCCTTT TCAAAACAGG TGTGGACCAT GCACAGATGA  
 CCTATGACGG GCAGCACTGG CACGCCACGG AAGCCTGCTT TNNITGTGCC CAGTGTAAG CCTCTTTNTT GGGATGTCCC  
 TTCTTCCCA AACAGGGTCA GATTTACTGC TCAAAAACGT GCAGTCTTTG GGTGAAGACG TCCATGGCCT CTGAATTCCT  
 CCG

SEQ ID NO:1284: (Length of Sequence = 283 Nucleotides)

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TTTTTTCACA AGGTGAAAGA CCTTTATGGA CATGACAGAG AGGACCTGAG TTAAGAGGGA AAATACATCT NCATAGCTAG  
 GTTCACATTC AGTTATGTTA GTCCCAAACC TACAAATTCa ACATGATCCC TATTAAAATC CTACCAATAT AGTTCAAAG  
 CTTGACAAGT TGATTGTNAC ATTTATATGA GAGANTAAAT AAAAAAAAAA AAAATAGGGC CAGGTGCAGT GGCTCACGCC  
 TGTATCCCA GCACTTTAGG AGGCCAAGGC GGACAGATCA CTT

SEQ ID NO:1285: (Length of Sequence = 341 Nucleotides)

CATTCINATG ATGTAGAGGC CAAAATGGTA TTINATAAAG AGGAAATTAC TTCTGANCCA CCCAGCTGG AAACACTGGT  
 AGTATCGGCA GCAGATGTGA TTACATCCGT TTTGGTATTA CACATCGTAT TTACAGCAGA CATGACTGAN CTGGGAACAC  
 TGCCCTGTGA GACAGCCTGA AAGTTTTTTN CAGATTTTNT GTGAACACTG TCTGAATTCA CATTTGGCAA AATGATTCTN  
 CCAGTTTCTC CGCTTCTGC TAGTTTGAGG CAATCTGTTT TATGTGCCCC AGCTGAAGAT CTTTCACTAA CTCGATCTTT  
 AGAAGCTAAC TGCATTGCTG G

SEQ ID NO:1286: (Length of Sequence = 354 Nucleotides)

GCCCTATTTG TACAAAGTGT GCATGTNAGC GTGCGTGTGT GINTTGCAAT TTTCCCCCTT TAGGTGGTTC AAATTTGGAA  
 TTTGTGAAGG CAGAGCTGAT AATTAGAGAC AATAAAAATC TGCAGAGTAG ATGGTTCCAC AAACAAGACT ATGAAAGAGG  
 GGATAAAAGA AGAGGTCAAG AAAGACTCAA GAACAGTATA TAGAAATAAT TCAATTACAT TATGTGTATT TTAAGAAAAA  
 CATGTTCAAA CTGCATGAGA CAGAAAATAG CACTCNGTTA TCCTCCTAGA CTTCTNAAAG TTTTGAGTTT GTCTGCAATC  
 TTTCTCCATT AATCGNCTTT TGCCATCTTC AGAA

SEQ ID NO:1287: (Length of Sequence = 354 Nucleotides)

CTCTCTCACC CGGTGGCCTA TAGCCCCCAA CGTGGTCAGC AGCTGCCTCA GCCATCCCAG CAGCCTGGTT TACAGCCCAT  
 GATGCCTAAC CAGCAGCAGG CGGCTTACCA AGGCATGATT GGGGTCCAGC AGCCACAGAA CCAGGGCCTG CTCAGCAGCC  
 AGAGGAGTAC CATGGGGGGC CAGATGCAAG GCTTGGTGGT TCAGTACACT CCACTGCCTT CTTACCAAGT TCCAGTGGGT  
 AGTGACTCGC AAAATGTGGT CCAGCCGCCT TCCAGCAAC CCACTGGT CCCTGTGAGC CAGTNTGTGC AAGGAGGCCT  
 NCCAGCAGCG GGGGTACCA GTGTACTATA GCAT

SEQ ID NO:1288: (Length of Sequence = 231 Nucleotides)

TTTACTTAAT TGGTATAGAT TGAGGNTCAT GCATCANCA GCACTTTTGA AATTNTCCCC AAGTGATTCT NACCTGCAGC  
 CTGGGTAAAGA AGTCGCAGGG CTCTGGATA GTCATTAAGT GAACTGTGGT AAGCACTGAT GTAGCAGGAT TACCTGCCCT  
 ACTAGGTGCC GGAAGTGCAT TTNCTTGCTC ACAAGTAATT TTTTAAATG TATGCTCGCA TCCCTGCCTT G

SEQ ID NO:1289: (Length of Sequence = 329 Nucleotides)

GGACACTGTG AGGGGAAAGG ACAATTTTAA AATTCCTTTT CAAGGAAAAA AAAGTCTTT ATGCTTTGCC ATGAGGCCAC  
 ATTCAGCTGC TATTTAANCT TAATATCTTG AACCTAAAGA ATGCTGACTT TNCCTACATT TCCAGAGTTA GGCACTATTC  
 TACACTTAAA GACTACTACT ATTTTATATA AAGGTAATCT ATTCAAATTT CTTACAGAT TTCCCTTGCT GGGGATCAGT  
 TAGTAAAGAA GGAGGAATTC CTCTTACCCA AGAGGAATTG CATTGCTTTA ATTTAGCAAT GTGAGGTAAG GCCTGCCNAG  
 TGCCAGGG

SEQ ID NO:1290: (Length of Sequence = 297 Nucleotides)

GGAGGCACAT GTGCAGCTTT GTTTCATGGG TAAATGTCAT GTTCTGCGG CTAATGTGGT TTCTTTTACA GAAAAAGTA  
 TCAGAAATAA TCGGTTAACT TTNCTCACAT GGTCTTAACT CTCTTCAGG AAATATCTAA CTTGTAAAGT CAATCCTTCT

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TGTATAGCTG CCAGACCAGA CCCAGATAGA CCATAATAAA ATAAATACA CAGTCAGTTT TTAATGCAAG CCAGAATGAC  
TCINCTGTAT CTTTAGCCCT TCCAGGGGGA TACAGTGAAC TCAGATATCC CTGCTTA

SEQ ID NO:1291: (Length of Sequence = 317 Nucleotides)

CTATAATCCC AGAACTTTGG GAGGCGAGG TGGGCGGTTT ACCTGAGGTC AGGAGTTGAG ACCAGTCTGG CCAACATGAT  
GGAACCCCAT CTNTACAAA ATAAAAAGCA AGATATGCAA AATAATGTGC CAGTNTGGTG CCGTATACCT TTAGTCCCAG  
TTACTAAGGA AGCAGGGTGT CINAACAGA AGAATCACCT GAGCCCAGG AGGTGAGGC TGGCTAAAA TAGATCTGGG  
GGTAGTGGTT AATNGGCGCT TGTAATNAT TCAGCATAAG GAACTGTCCA ATATTTTTT AAGCTGTCAG AAAATCC

SEQ ID NO:1292: (Length of Sequence = 293 Nucleotides)

GAAGATGGAA ATAGACCACC ATACAAAACA AAAAAGACAG AAGAGAATAT TAGCACTCTG TTGCAAAGGA GAATAGGTAT  
GCTCAACTGG TAAGTAGAAT GCAATATTC CAATATCTGA AAAAAATCCC AAATCCAAAA TACTTCTGGT TCCATGCATT  
TTINCTAAGG GATACTCAAC AGGTATTTTA AAAGATCAAA ATACAGATCA GAGAATATGG ATACTTGAAG ATTATGAGCA  
AACGAGGATT AAGGNAAACA TGTGGAGGA CTTTTTAAAA ATGTGTTAAA GGG

SEQ ID NO:1293: (Length of Sequence = 310 Nucleotides)

TCCAGAAAC ATTACGGTTT GATATCAAGT TCCTATTTTA AGAGTCACCC ATTGCCCCAC CATAAGTNC TGGAGAAGGT  
AGGGTATTAC AGGACTAACC TTCCAGTGGC TGATTCTGGT GGTITCCACA TTCAGGTTTC TCTGATTTTN ACAAGCTTTT  
TCCATAAAG ACTGCATTIN CTTTAAAAGC TTCTCTGCA AAANAGCCAT AAATTGAAGC ACCAGTGAAG ACAATAAAGT  
AACATACAGA CCGTTTCATT GGGAGGGGGC CCNGAATENG AGACAAATAA GTCCCTAGTA AATGGCATT

SEQ ID NO:1294: (Length of Sequence = 275 Nucleotides)

GAATGACGAT GTCAGGGGCA TCAGGAAAGG TAAGGGCCGG GAAACCGGGC CCTTGGAGAA CCTGCCCCAG GGGAGGCCCA  
GCCACTCAC AGGNTCCGAC ACTCCAGGCA GAGCAGAGG CAGGAGAGGC CCAAAGAGCT AGGTCAAGCA GCTGGCTCCC  
CTGGGGTTAA ATACATGGGT TTTGTTTTTA CTGCTGTGCT TGATATACAT GAAGTAATGA ATACCAAGCA ATTCAITTTT  
CCTGCATCTT TACTTTTACA TTTGINTTA GGTTCCTAA AACATTNAA ATACAATAA ATGAGTGTAG CAAAAATTAT  
TGAAGCT

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CAACCTCTGC CTCCCGAGTT CAAGCGATT TCCTGCCTCC CGAGTAGGTG GGATTACAGG CATGATCCAT CACGCCAAC  
TAATTTTTTA TTTTAGTAG AGATGGGGTT TCTCOGTGTT GGTGAGGCTG GTCTGAGCT CTGACCTCA GGTGATTCAC  
CCACCTCGGC CTCCCAAAGT NTGGGATTA CAGGTGTGAG CCACCGGCC AGGCTACTGG TCTCAATTCT TTTGGATACC  
CAGAAGCAGA AATGCTGGGA TCACATGGTA GTCTC

SEQ ID NO:1296: (Length of Sequence = 247 Nucleotides)

GGAAGGAACA ATTGATAAGA ACCGGGGACA TCAGGGAGAG AGAGTATTTG AGCTGGGCTT GATTCCATCG GGTAGTATCT  
GGAAAAAAA AAAAAATCC CAGATGAAAG AATGTACAAA GACATGAGCA TGCAGGGCAC ACTTTGGAAA ATGGGNGAAG  
TCTGACAGGC CTGGGAGAAT GAAGACAAGT TAGCACCAGN TTNAGAAGGC CTGATTACA NGGCCAAAC TTTTGGATTT  
TACACTA

SEQ ID NO:1297: (Length of Sequence = 246 Nucleotides)

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GACTTCTTAC AATGCAGCAG CAAGAGAAAA TNAGGAAGAA GCAAAAGCAG AAACCCCCAG TAAACCCATC AGACTTCGTG  
 AGACTTATTC ACTATCACTA GAATAGCATG GGAAAGACCA GCCCCCATAG GTCCACTACC TCTCCCTGGG TCCCTCCCAA  
 AACATGTGGG AATTATGGGA GATACAATTC AAGTTAAGAT TTGAATGGGG ACACAGTCAA ACCATATCAT TCTGCCCTTG  
 GCCCCT

SEQ ID NO:1298: (Length of Sequence = 263 Nucleotides)

CATTGCACTC CAGCCTGGGC AACAAGAGCA AAACCTCCATA TCAAAAAAAA AAAAAAAGAA GAATTGCTGA CCTTTATGTG  
 TTTCTGTTTA AGTTCACAAC AGTCATAATT CTGTAAAATA CAAGGCAAAA CTGTAGTTTC TGATACTAGT AATATATCTA  
 ANTCAGTAAG TAAAAAGGAT GTGTAAAATC TTAATAGGGG AAATAATTAT TGTATGANCA AGCAATTTCA AAATCAAAAG  
 NCACGTTTCA GTATATATTA TAG

SEQ ID NO:1299: (Length of Sequence = 272 Nucleotides)

ATCINATTGT TGTGTAGTTT ATGGCAGTGG TCTCCAGACT TTTTGGCACT AGGGACCAGT TTAATGGGAG ATAATTTTCC  
 CATGGACGAG GGGATGGGGA GGAGGCAGGG GTGGTTTCTG GATGAAACTN TTCCACCTCA GAAGATCATC AGGCATTAGT  
 TTCTCATAAG GAGGCAAAAC CTAGATCCCT TGCATGCACA GTTCACAATG GCACTCGTCG CATATNCCGT CGACAACCCCT  
 TTTTGGAGGT TCCATGCTTC CCATTGGCT TT

SEQ ID NO:1300: (Length of Sequence = 277 Nucleotides)

ACCACTGCAC TCCAGCCTGG GTGACAAGAG TGAAGTCCA TCCTAAAAAA AATGTGTAAA ATGAAGATTA TCATACTACC  
 TACATCATAG AATTGTTTTT AGTGTAAAAT GTGTGTGTGT ACATTTATGT AATAGTTAAC ATTTAAAGAG CACCTACTTT  
 GTGTAAACAT ACTTTGTATG AGATACTGTT CAAATATATA TNCTAATATA TGCAACATAT TATATATGTN AGAATAGGGT  
 CTTATATATC TTAGGAAGTT AGATCTTATA TGTTTGA

SEQ ID NO:1301: (Length of Sequence = 304 Nucleotides)

GGTTCGGGGT TATGTAAATC CCAAACCTTAT GAACAGGAAA TGTGTACAGT GCATGATAGG TTAATTTTIN CTTTATTGTT  
 GTCCAACGCA GGTCTTTTGG AGAGAAAAAA AGATCACAGT GCTGACCAGG TAACTCAATA GGTTAAGTCA AGGTAACCAT  
 TGAAAGATAA TAGGATTAGG GAGGTGTTTA TTTTATGGCA TCTTCTCTCA TGGAGTTCTT AGCACTTCGG ACAATTTGTC  
 TTTTCCCCAC TTTGTACAGC TGTTATGTGT CATTACCAG CCGCTGTAT TTAACCTGCC TACT

SEQ ID NO:1302: (Length of Sequence = 335 Nucleotides)

AGTTTATTGC CATACAGAAA ACATTTTATA AAATAATATG GTAGACTTCT ACTTCAACAT ATTCACGTAA AAACATCACA  
 GTGCAAGAAA GTGATCACAA TTAAGCATGA AGACATCAA AGCCAGCCAG TATTTTAACT ACAGAGCAGA ATATTCTTGC  
 TGTCCCTTCC TAGAAAATGT TGSCACATTC ATTAACCTGCT CAGGTACAAA AAATCACCTC GTGTCCACTT CCTGTCCCTC  
 AATATATTIN CATAACTACA CTGTGTTACA TTAATGCTGG TGGACAAATT AGCTCCTATA AAATCTAAAA ACCTTTTCAG  
 GTGGGCACAA TGGTT

SEQ ID NO:1303: (Length of Sequence = 316 Nucleotides)

TGGAGCTGTA TATGGTCCGG AGTTATATGC AGCATCCAGC TTTCAAGCAG ATGTTNCCCT AGGCAATGAT GCAGCAGTGC  
 CCCTATCAGG AAGAGGGGGT ATCAACACTT ACATTCCCTT AATCATTCCT GGCTTCCCTT ACCCTACTGC AGCCACCAGC  
 GCAGCCGCTT TCAGAGGAGC CCATTNAGG GGCAGAGGGC GGACAGTATA TGGTGCAGTC CGAGCGGTAC CTCCAACAGC  
 CATCCCCGCC TATCCAGGTG TGGTTTACCA GGGACGGATT TTACGGTTGN TGACCTCTAT ATAGATTCTG CAAACT

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SEQ ID NO:1304: (Length of Sequence = 211 Nucleotides)

TATTTTINC TTCCTCTCTC CCTACATATA TTCTAAACCT TCTAAAGTTT TTINATTTTT TTAAGGATCA CTTTATCATA  
 AAATAAAATA TCCTTTTCAT ATAATAAATT ACCTAATAAA AAGTCITTTT TTTTCATATT AGCCCAGGTN CTTTGCTACA  
 TTTATATGGT AATAAACGCC TTTATTAAAA TAGANTATTA AATTATAAAG A

SEQ ID NO:1305: (Length of Sequence = 316 Nucleotides)

GAAATGATTG AGGGAAAAAA ATTTATAGTA CGTTTTCAAC TTTTTTTTTT TTCTTTTGAA ATGGAGTATG GTCATAAAAA  
 GGACACTAAA TAACCTGATT AAGCTAGAGT ATAGACCAAA TTGCCACTTA CTTTGAATTG TTTTACCAA AGGTATCACT  
 TTGAATAAAG ATAACTTTCA TTAGACATCT ATCTTTATGT GTTCCTGCCA TCATTTTCAGT GAGATCAGAG GAAAGTTAAA  
 TTAGGAACAA TGAAAAAGCT TAAGAAATGA ACAATCATCA TGCITTTTGTG TATGCTTAAA GTGAGTACAT GTAAAA

SEQ ID NO:1306: (Length of Sequence = 310 Nucleotides)

GGGGATTTTT GAAGGCTTCG CTGTGGATGG CCGAGAACCT GCTCGGGGTG TAGGTCTGTG TGTCTGGGGG ACAGTTTCCA  
 CATCTGAGCA CACGGACTGG ATTTCTGAAA TGTCAAAGTC TGATGCATCA CTGCCTCGGC GGCTGCTGGC CTTNCTGCCA  
 GCTTGTCTTC CAGCTCGACT TCCTGGTCGG CTGGGAGTCT TCTTGAATC AGCAAACGT GTTCGGACTC TGGCAGNTGC  
 AGTTGTATC AAGCCACTGT CCTCCCCANA GTGGAAGCCT TTCCCTGATA AAAATCCTGG AAGTCGAAGC

SEQ ID NO:1307: (Length of Sequence = 302 Nucleotides)

TAATAAATAG TATATGTAGT GAAGAAAAAG TTATAACAAG TATACATTAC ATTTAACACA CCTAGCACAT AGGACACCCT  
 CAACAAACAG CTACAGCTGC TGTAATCAT GTGTATATAA TATAACATGC AAGCATATCT TCATGTATTG ATTAATTACT  
 ACTTCTTGGA AAAGGATCTG AGGAACATAT TTAATATATT TNATATGCCT GCTCATATGT NCATTTAGTG CTTATCAATT  
 ATATTTAGTG CTTTTCTATT AGCTTCATCC ATTTGATTAA GATAGCAACT TGTATTATTT AA

SEQ ID NO:1308: (Length of Sequence = 285 Nucleotides)

CGCCGGCCAA CGTGGTCTTC CTCTACATGC TCTGCAGGGA TGTATCTCC TCCGAGGTGG GCTCGGNTCA CGAGCTCCAG  
 GCGTCTCTGC TGACATGCCT GTACCTNTCC TACTCTTACA TGGGCAACGA GATCTCTTAC CCGCTCAAGC CCTTCTGGT  
 GGAGAGCTGC AAGGAGGCCT TTTNGGACCN TTGCCTCTCT GTCATCAACC TCATGAGCTC AAAGATGCTG CAGATAAATG  
 CCGACCCACA CTACTTCACA CAGGTCTTCT CCGACCTGAA GAAGC

SEQ ID NO:1309: (Length of Sequence = 319 Nucleotides)

TTTCCAATTA TTATTTTGCC AATATCCTCA ACTCTTTTGC CCACTTTNAT CTTCCATTCA ACCCTCCCTG CAAAATCCTG  
 ATCTAAAAGC AACCCAAGTA TTTGCCCTCT CAACCTCCCA GCTGCTGAGT GGTTTTGGGA ATTACACAAC CACTAAGCTT  
 GGTGCAGATG CACTATGGCC TCAATAGAGT CCCCCAGTGC TGCCCACTTT CTCCTTCCAT ATTTCTCCAC AGCAGCTGGT  
 CAAATACAT TTNTCCCCAA ATGTCTTACA CAACCCCTT CTCTCTTATC ATCCTTANCT CACCCACC CCAGTTCTT

SEQ ID NO:1310: (Length of Sequence = 356 Nucleotides)

TGAAGTTTTG CTCITGTGCG CCAGTCTGGA GGGCAATGTG CGATTTTCAGC TCACTGCAAC CTCTGCCTCC CGGGTTCCAG  
 CGATTCCTCT GCCTCAGTAT CCCAAGTAGC TGGGATAATA GGCACTTGCA ACCATGCCCA GCTAATTTTT GTAGTTTTAG  
 CAGAGACGGG GTTTCACCGT GTTGGTCAGG CTGGTCTTGA ATTCTTGACC TCGTGATCTG CCGGCTCGG CCTCCCAAAA  
 TGCTGGGATC ACAGGCATGA GCCACGCAC CTGGCCCTAT ATCTGCTTC CTATCTCGTG GGTATGGTG TATGGCTTTT  
 ATTTATTTCA ACCTGCAGTT GTTTCAGAA CATCTG

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SEQ ID NO:1311: (Length of Sequence = 331 Nucleotides)

AGCTCAGATT CATGTCTTGA GCCAAACAAG TGAATGTATC TNAGAAGACT CAGTACCACA TGGTACTGGG AGATCTTACT  
 CACTTCAGCT GCGTTGCTC ATTAGTGAAT GTATGACAGC AGGATGTGAG GGGATGCCCA GGAGTCAGTG TTAGCATTGT  
 CATCTGAGAT CACTGCTATT AATATCATCC ATTAATTTAT TAGTGAGCTT CACTATATGC AGACTGGGAG ATAAGGAGAA  
 AATCTGTCAC ATTCTCTCTA GCTAATCAGA TCAGCTACCA ATTAATGAGA TTCTGAATGA AATATCAATA TGTGTTTTTC  
 TAATTTGGAC C

SEQ ID NO:1312: (Length of Sequence = 347 Nucleotides)

TTTTTTCCTT TATAAATTAC CCAGCTTCAG ATTTTITNAT AGCAATGCAA AAATGGCCTA ATACACTTCA GAACCTGGAA  
 GATTAGCAGT GAGAAATAAA ATCAGTTAAG TTGATGACTT CTAGTATTTT ACTACATGGT TGTTTTGCCA AAATGAAGGC  
 AATATCAGTG TCTTCACACT TAAAAAGTAG TATATTGANC TTTGAGGTGA AAGAGCTGGG GTTTAAATTT GTNCTTTACC  
 AATTATTGAG ATAAGTGTCC TTGAGCAAGT TACTTGCTTT CNCTGATCTT TAGTTTTCTT ATTTGTGAAA TTGAAATGG  
 TGGTGTTC GAGGGGGGTT GTATATA

SEQ ID NO:1313: (Length of Sequence = 336 Nucleotides)

GAATTCCTCT ATCAAAGTGT TCATAAAACC TGGAGCTGCA GCTGGCCCCC ATTAGGTAGT TTCTTGGTGA ACGTTTTCCA  
 AGGAAAACCT TTTTTTAACA ACTTCATAAA GCCAAGCACA AAAGGACATT GCAATGACTG GCTGAAAGAC ATGGGACTTT  
 TTGCTTCGA CGACTAAAAC GTTAAATGGG GGCTTACTTT GTGCATTTAT GGAAGAAAAC TTGGAAGGCA TTAAAGGCTA  
 CATTTTGAGC CTGTCATGAT TTCATTCATT TATGCATGAA TTCATTGTGTT CAACATTTAT TTAGTACCCA CTATATGCCA  
 GGCACGTGTC CAAATG

SEQ ID NO:1314: (Length of Sequence = 391 Nucleotides)

CCGGTTTAGA CCTCAGTCCG CGCTGTGAGG GCACTGTCCG CCCACCTGCT CGGCTGGCTG AGCTAGGTCA GTGGAGAGAA  
 GCTGGGGCCA CTCACACAGC ACAGCAGGCC ACAGTCTACA GAGTACGCCA GGTAGAGCGG TTAGAGTGGC AGCCGCTGGA  
 GAAAGGGTTA TAGAAACACA TCCCTGACTC TTTGGTTATG TCCACGTCC TCCTGTCTC CTCCCTTC CTTACTCTCC  
 TTCTTTCTG CTTCTGTGTC TCCTTTGGAA GTCCCTGTG TCAGTGCATT TNAGTGCATT GACGTGTCTT AAACACTGAT  
 CTNCACACAC CTTCTTTAT CTTCCACCTG ATAGGCAGGC CCCAGANCCC CTTTTTCTCT AGCTTTGTTT T

SEQ ID NO:1315: (Length of Sequence = 374 Nucleotides)

GAATTCCTCT GAACACTGGT GTTACAGAG AGAGATACTT TGTGGAATGG AGCTTACATG ATGAATGAAA AAGAGACCGT  
 TAAAAAGTAC TAGCCGTTGT TTACAAATAA CTACCAGGTA AACAAAGAAA TCACTTTCTT TCCCCTTTCT AAGGATAAGG  
 GAGAATAAAA TAATCACCAA GAGGCATGGA GTTTGAAAAG TATATAACAG ATTTCTTTAT TATTATTTAC AATCAAGTTC  
 TGTGTGNCAT CATAATGAAA TAAATAAAAG ATGTGCCCTG GCCTGTGAAT TTCAACTCTC CTTGACTTAA GTTCTCTGAA  
 GGGCAAATTG GAAAGCGGTG ATCAGGCAGG GAAGAGAGGG CAGGTGGAGG CCAG

SEQ ID NO:1316: (Length of Sequence = 353 Nucleotides)

CTTGTTTACA GGTTTTGAAA GGTTTGINAG ATTAGTATTT ACTTTTAATT TTTTGAGTAA TAGAATGCGT TTAGGTTCTA  
 AATTACTATG GAAATGSCAT AGTGAGGATT CTNCACAGAT ATTAGAGACC TTCAACAACA TAGTGAAAAT AGATTGTGCC  
 TTTCTGTGTA ATAGCTGAAC TATGAAAATT TGANCTGTCA CTGGAGGGGG CATTTGCNCT GAAGTTTGCC AAAGTAAAAA  
 TAACTTTNCCT CTTTAGTAAG AAAAAGCTAT ATTTTNCAT ACTGCCTGCC ACAGCAAACA AACAAAGTCT TGTTTGTGTT  
 TTAATATTGG CAAAGGAAAA ATTCTCTATA TAA

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SEQ ID NO:1317: (Length of Sequence = 316 Nucleotides)

GAATTCGAT TATAAGCATC AATATGCATA AAATGCITAG AGATGGACCT GATATATAGC AAACACTCAG TAAATGTTAA  
 CTATTATTAT NACAGCACAG CAATTTATTT AAGATTACTG AGTGTTCAAA TGAAAAAAAA GACATATTAA CTTATATAGT  
 GCCATTTCTG ACATAAGAAA TACACAAATA GAGGTAGTTT CTGAAACAAA GATCAAAAAA ATCTATTGTA TGGTGTCTTG  
 TATCAATGTG GCTAAAATTT TCGAGCTAAG TTTTATNAAA GACAGATCAT ATTTCANGTA GGTGATTTTT GTATTG

SEQ ID NO:1318: (Length of Sequence = 300 Nucleotides)

GTGGGACTAC AGGTGCACGC TATCATACCC AACTAATTTT TGTATTTTTA GTAGACATGT GTTCCCCAT CTTGGCAGGG  
 CTGGTCTGAA ACTCCTGACC TGAGGTGATC CACCTGCCTT GGCCTCGCAA AGTGCTGGGA TTACAGGTGT GAGCCAACAA  
 GCGTGGCCCA TTTATTTACT TTTTAATTTT CATTTTCTT CATCATGTAG AATGGACAAT TTCAGGAAAC TGATAGAAAA  
 TACTGTCTAA CATCAAATTT TCAAAAAAGT TTCTCTGTAA CAGATAAGGC AGTCAATTTT

SEQ ID NO:1319: (Length of Sequence = 306 Nucleotides)

CAATAAGCTT TAAAAAGTTA GTGCCACATG ACCAGCATCG ACTGGCCTCA GACATCTGCA AGCACTCACC CAGGCCACAG  
 GGTACGGTAG AGGGCTCCTG GGCCCACTGT AGCCCTGCTT GGGTCAGTGT AGCTGGAAGG CTACGGGNC TTAGTGGGGA  
 GCCACAGCCT TTCCCACTAG GGGGCTCTC ACTCTGACAT CTCCCTGTGG TGTTCGGACC AAGGGTGGGG AGGGAGACAC  
 GCTGGCCCTA AAGGGAGGTG GTAATNAGTG AAGATCTCCA GGGCCAGNCC ACAGGGCTCC GTCCAT

SEQ ID NO:1320: (Length of Sequence = 373 Nucleotides)

GGTCTTGATC TCCTGACCTC GTGATCCACC CGCTGGGCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGTGCCCTG  
 GCGGAGATAA TTATTTTINA GTGACGATTT AGCAACCTGA AAACCTTGGG TCTTTGGGAT ATGACCTCAG TATCAACACA  
 GAATATTTGA ATGCTGGTTA ATATATTTNT TTTAACTGT GATAGAATTG AAATCTTGTA GCCACATTTT GAAAGTTTTAT  
 TCTTCATTAA CTAGTCTTTT CTCACCTGAT TTCTACAAG AGAGAATTTT CCAAAGGTT AGTTGTCTGT ACATTAAGAA  
 CTGGGGTTT GNTTGACATG AAATGTTTCT ACACCAGCAG GTCTCAGATG AAT

SEQ ID NO:1321: (Length of Sequence = 366 Nucleotides)

GTITGGCTAA TCATCCTATG ATTTTCCTAT AGCTTGAAAA CTTTTTATAT CTTAAATTTT TTNATAATTT TGAAGTATTA  
 TTGTTTGGGC TTGTATATC CAGTGATTTT TCAATTAAAT TCCCCTAACT AAAGTAATTC AAAAGGAATA AAAGTGTAA  
 TGGGGCTGGG CGTGGCGGCT CATGCCTGTA ATCCCAGCAC TTTGGGAGGC CCAGGCGGGC AGATCACCTG AGGGCAGGAG  
 TTGGAGACCA GCGTGGCCAA CATGGTGAAA CCTGTCTCT ACTAAAANTA CAAAATTAGC CGGGTGTGGT GGCACATGCC  
 TATAATCCCA GCTATTTGGG AGGCTGAGTC AGGGAGAATC TCTTGA

SEQ ID NO:1322: (Length of Sequence = 362 Nucleotides)

AGGGAGGGTA AAACAAATCC CCTCCAATG CTTGTAGAA GGGGATTAGA ATCACTGTGG AATTCGGTAT TGGCTAATAA  
 AGTATAACG CTAAAGATCA ATGCCGAGT GCACAGTTGT CCTTCAAGCC ATTGTACTTC TGCTTTCCAA GANTAGANGA  
 CTACTTTTTA ACCAAGANTT AAAAATAANC TCATAATTTA AACACCTCTT TCATGCCAAA TGGAATCTT AGTGTGTAAT  
 AATCAGGCTC ACCTGAATAC AAAGTTGTCC TGAAAATGCT GACAATCACA AAAAGGTTT TAGAAGCTTT TTCAAAAAAC  
 AAGTTGAGAT GGTTCCTACT GAGTTACTAT TTGAGGTTAA AG

SEQ ID NO:1323: (Length of Sequence = 244 Nucleotides)

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CGACCTCAGT GTAAATCACA AAACGGGAAG AGCTGATATT GGCAAAATAA TTACATGGCT CATTTCCTTG CATGTCAAAA  
TAGGATTTGA TTGGTTGTAA AAGATGACAA ATACCTTTNC GGTTTCAATG TTCTTAAGTG GGAAGTCACT TATTACAGAC  
CTNATTGGGA GTAAACAAAG CTGTTAGACC TTTCAATTATC AGTCCNNITA ATCCCTTCAA TAATCCCCCT AAATCAGTGA  
GGCG

SEQ ID NO:1324: (Length of Sequence = 279 Nucleotides)

GATCCATGCC ACAGTGACCT CTGTNACCT GCACAGCACA GAGGGGAAAG CCCTGTACCA GGTGGCGTAT GAGAATGAGG  
TAGGCAACAG CTCTGACTTC TATGACATCG TGGTCATCG CACCCCCCTG CACCTGGACA ACAGCAGCAG CAACTTAACC  
TTTGACGGCT TCCACCCGCC CATTGATGAC GTGCAGGGCT CTTTCCAGCC CACGTCGTC TCCTTGGTCC ACGGNTACCT  
CAANTCGTCC TAATTCGGTT TCCAGACCC TAAGCTTTT

SEQ ID NO:1325: (Length of Sequence = 338 Nucleotides)

TCAGTTATTT GTGTGTGTGT GTGTGTGTGT GTGTGTNCAT CTGCAAACCC TGCACATCAT TATCCAAAAA TTATTTGATA  
TTTTATAATC AGAGAAAATG CTATTTTAA ACCCTACCAC TGCTGACCAA ACAACAATCA CAACAGCATA AACTAAATA  
CTGTTCAACA AATCTATTTT AGTGTAGTAA TTAATAAATT CCTAAATTA TAGACATCCC TAATATTCTT TCCNITAGTG  
GTTCTCAGA GTGCAATCTG TGGAGCAACT ACCTGAAGA AATTTGGGG AATGAGACCN TGGGAACCC AAATGTTTAG  
NATGGTGCTC TNGGGGAC

SEQ ID NO:1326: (Length of Sequence = 393 Nucleotides)

AACTTTGGAG GGGACACCAT CACTCAAACC ATAGCTGTAA ATCTATTCCT TGAGTCCAGA TCACAAATTA CCAAATGAAC  
ACGTTCTCCA TTTTGTAGTAC TTTTTCACCT GTAACCTCT GTCTACCTAA GATGAATATT TATTCAITGA ATGAATCATT  
TAATTTTGGT GCCCCAAAAT TCTCAGTGAA ACAATTTCTG GATACCTCTC CATCACTAAG ATAATCACTA TAGCAGTGTC  
ATATTCTTCA ACTTAGNACA AATCTAAAGG CTCCATTTAT CCTACTAGA AGTGTTCTGT TGTCTTTTTC ACTCTCAAAA  
TATCCTCCAT GCGCNAACCA AACACTAANG GGNACCACCA TATCTTGCTC AATGGAGGCN AAATCACTTT TTA

SEQ ID NO:1327: (Length of Sequence = 381 Nucleotides)

CTTTGGAGAA TTAATTCAGC AGTTGGTAAA ATCATCTAT AATAATGGGT ACCATTCTGC TCTGTCCAC ATTTTATGA  
AGTCTCTTTA AATTTAAAAA GGCAATGTGC TTTGTGGTTC TTGAGCAACT TAAATACGTT GCTCTGAATA GTTATTGTGA  
TGAGGTAATT TGTAACAACT TTTAGGATCA ATGCTAATTT NCTTAAATGT TTCTGTAGTT TCCCTTTAT TATAAAGTAT  
ATTAGGCTGG ACTCTTGGCT GTAAGTGGCA GAAAACCTCA CTCAGATTAG TTAAGAAACA AAAGGGTGT GGTGACAGTG  
GTGGCTTTCA GACTATTGCT GCAGGCCAC CTGCCATCCT CTTACACCT CAACATACCC T

SEQ ID NO:1328: (Length of Sequence = 289 Nucleotides)

AGAAGAAAAT TCTTAAGCAG AGTACTTAAG TACAAAATTG AGTGACTGAA AGATGCTTAA TCTAGGGAAA TTAAATGAGA  
AAAATACATG GTGTGTGINT TGGAGGGGGA GCTGGAATTG GAATGGGCTG GAGTGATGAA AAAAGCCAA CAGATATAGT  
CTTCTGTTTT GTAATATAGG CTCAATACTA AATTATGTAG GACTAGATAA TCTAGGTCCT AATGTCTCCT TTTTGCTGGC  
AACCTGGGG CCAATTACAC TAGAGGGTTG GTAGAAAAA GAGGAATAT

SEQ ID NO:1329: (Length of Sequence = 364 Nucleotides)

TTGTATATTT GGGATTGTCA ATAATCTAGG CCACGTGGAA GATAACAGGC TATTTTGGAT ATTINCTAAT TGCAATGGTT  
ATATTTCTGT GTAAATGCCT ATACAAATGT TTGCTTGGTG ACATATGGAA AACTTAAGGN CTTTATGAA AAGGCGACAA  
TGGGGACCTC CAAAGCGCCA AAGTTTCTGC TAGGCATAGT GTTATTTTGA GATTACATTA AAATGGCTAT TTAGACCCAT



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CTAGCTGAGA CTATTCCAAA ACAAACCTTT TATCANATTG INATCATAAT CAACTTTCTA CAGGCTAATG ACTTTATAGN  
TTTACTNCTA GGTATATCT ACTAGCACAA TTGGACCCAG TTCC

SEQ ID NO:1330: (Length of Sequence = 221 Nucleotides)

CAATATTTAA ACAAATGCA AAAGTGAACG TTACCTCAAA ATGAAACAGT GGTGTACTG GCTGTAGAA GTTGATGGCG  
GTCTACTGTT TGATATTCAC TGCCATCTC CTCTGCCCCA CTCTACCTCA ACTCGGGACC GCCTCACCTA ATGGTGGGCT  
TTGCCGCTTT ATGCCNTGTA GAGNAGACAC TGGGTAACCA CAGCAAATCA ACACGGGNTC C

SEQ ID NO:1331: (Length of Sequence = 279 Nucleotides)

AATAGAGATA ATGGTCAACT CTGAGAAGA ACCAAATGCT GGTGCCATCT TGGAAAGTGT ACATCACCTC CTCCTCTTAC  
TTCCTTGAAC AGCAATATTT CTGGATTTCT TCTGCAAGCC CCAGGCAGTG CAGGATGCGT TTNTTTTCAG CAGCCAGTTC  
CTTCTCAGAG AACTGGCCCC AGAGTTTCTG GACAAATATA TTTTGATCTT TCAGAAATAT GTTCTNATTC ACTCCTACAT  
TTGGCACATT NTCCAAGGGC CCAGACTTGA AATTGGAGG

SEQ ID NO:1332: (Length of Sequence = 290 Nucleotides)

GGACGAGGAG ATGTCTTTGG TGGACTTGGG AAAGAGGTTG CTAGAAGCAG CAAGAAAAGG CCAAGATGAT GAAGTGAGAA  
CGTTGATGGC AAATGGCGCC CCATTCACCA CAGACTGGCT TGAACATCA CCCCTCCACC TTGCAGCTCA ATATGGTTCAT  
TATTCACAG CAGAAGTACT CCTTCGAGCA GGTGTAGCA GGGATGCCCG GACTAAAGTA GACAGGACCC CCTTGCACAT  
GGCTGCAGCC GATGGACATG CGCACATCGT GGGAACTGCT TTTTGGGAAT

SEQ ID NO:1333: (Length of Sequence = 201 Nucleotides)

CGCCAGCTA ATTTTGTAT TTINAGTAGA GACGGGGTTT CATCATTTNA GTCAGGCTGG TCTCAGACTG CTGACCTCAT  
GATCCACAG CCTTGGCCTC CCAAGTACT GGGATTACAG GCATGAACCA CCACGCCAT CTGATTTCCC GTTTCTGCA  
GGGTAAAGNC TCAGGGCCGG CCCATTGNT TCAGGANITT T

SEQ ID NO:1334: (Length of Sequence = 267 Nucleotides)

NNATAACTTT TTGTTGAAAT TTAGAAAATG TGGATCTTTT ATACTTGCTT TCCCTTTCT TCTGCCATCT TTATCTTCTG  
CTGAAGGAGA CAAACAATAT TTTAGGTGAC ATCTATCACT TTATGTAGGA CCTGCAACA CTCATGTTGT CTTCGGACAG  
ACAAATGGAG AATGTAAATC TGTTACACTG TGACAGGATA TAATNTGGA TTGCATAGN TTNCAACAA GTGTCTGTGT  
GATGANTAAA TGGTAAAATA TATTTAT

SEQ ID NO:1335: (Length of Sequence = 279 Nucleotides)

GGNTCTGTG AGAATGCAGA TTCTAATTAA AAATGTGTAG GACAGGGCCT GAGACTCGGT ATTTCTAACA AGTTCCCAAG  
TGATACTAAT GCTACTGCTT CACAGATCAC ACTTTAAATA GTAAGGTTCT TGAGAGAGAT TAGTCTCAAG AGAAAAGAGA  
CAAAATCTC CAGAGCAGGA AGACCAAGAA AAAAAAATGG AAAGTAGCCA GTCGATTATC AACTAGATGG CCTTAGTGAG  
ATTCTGCACA ATATTTTCATC ATACAAAAC GNTTTCCCA

SEQ ID NO:1336: (Length of Sequence = 398 Nucleotides)

TTTTTTAAGC ACTCTGTGT GGAATGGTCA AAGATGTTCC TAAACAACA TTGCTGTCAC CAAGCCTCCC ATGANTTAGG  
CTGGCTCTC CCATGTGGAT ATCTGCTTCT GCATAGTTGG TGAAGAGGAA GCATCCTCAG TCAAAGCTAC CAGCTGAGGA  
ACCTTAGGA AACCCGCTG GTACCTGGCC TGTNTTTGT AAGTATACAT CAGGCCAGGG GGCTGCTTGC CAAGCAACAT  
CATGACTGC ATACTGTTTA GTGCATGCAT TACCAGGGCT CAAACATCCA AGTGATGCTA CCTGAATAAG TCGAGGAATT

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TTTGATAATA AACATAAGCC AAATCCAAAA AAATGTTCTG GGTTTTTCCA TCATTTCCAC TCATTAGTNC CAGGAAAA

SEQ ID NO:1337: (Length of Sequence = 272 Nucleotides)

CTTTCCTCAG TATCACAGGT ACCTGTTTIN CTGGAATTTA TTTAAAATGT CACCTTGTAG TGTTCCCTCT CTAGGGCTGT  
TTGTTTCATT TCCCTCTGAA TGAATGCTGC CACACGGTCA TATGTGAGCC AAGTTTACAA GAATGGAGTT GCTGCTGAAG  
AGATCTCTCA TTCATCTCCC CCAGTGCCTG TCCTTCACAA TCATAACGTT ACCCTTGCTT GACAAATATA CTGTATGGCA  
AGTCATAAAG GTCTTNGAAC AGGACTTGAC CC

SEQ ID NO:1338: (Length of Sequence = 212 Nucleotides)

TAGTCCCCCT TATATAATAT AATCAAGTTC CTCCATCTGG GCATTGAGTT AAATTCTACA ACATTGCCAA AATCTGATTT  
GACTCTACAG AATATGTATA GTTTATTTAA CCAGATAGTA ATTTAAATTT TTACAACATG CGTATTTTAT GTAATATTAA  
TAACAGTAAT TTAAATTAAT ATTCATATACA TACCGTTTGA ATTTTATATA GG

SEQ ID NO:1339: (Length of Sequence = 280 Nucleotides)

TTTTTAGGAA TAACAAATGT TTATTCAGAA ATGGATAAGT AATACATAAT CACTCTTCAT CTCTTAATGC CCCTTCTCT  
CCTTCTGCAC AGGAGACACA GATGGGTAAC ATAGAGGCAT GGGAAAGTGA GGAGGACACA GGACTAGCCC ACCACCTTCT  
CCTCCCGGTC TCCCAAGATG ACTGCTTATA GAGTGGNGGA GGCAAACAGG TCCCCTCAAT GTACCAGNIG GTCACCTATA  
GCACCAGCTC CAGATGGCCA CGTGGCTGCA GCTGTACTCA

SEQ ID NO:1340: (Length of Sequence = 324 Nucleotides)

CTGTTCCACC TCAGATCATC AGGCATTAGA TTCTCATAAG GAGTGTGCAA CCTAGATCCC TCCCATGTGC TGTTTCATAGC  
AGGATTTGCA CTCTTATAAG AATCTAATGC CACTGCAGAT CTGGCAGGAG GCGGAGCTGA TGGTGGGAAG GTGGTATTGC  
TOGCACTCTC GCCTACTGCT CACCTCCTGC TGTGGGGTCC AGTCCACC ACAGACCACT GGTCTNTGAC TCAGGGACCA  
CTACCTCT AACANGGNTG AGGAAAACAA CTGGGTTTAT CACACAATTA TTTTAAAGTT CAGGTTTTNC AAATAACTTA  
TCC

SEQ ID NO:1341: (Length of Sequence = 376 Nucleotides)

CTAATCAAGG GTACAAGATG TCTAANTCAA AGGCCAGCT CTGCCTACAA GTCAAATATC TAGGCCTAAT CTGGCCAGA  
GGAACCAGGG CCTCAGCAA GGAATGANTA CAGCCTATAC TGGCTTATCC TCGCCCTAAG ACATTAAAAC AGTTGTGGGG  
GTTCCTTGGA ATCACTGGCT TTTGCCGACT ATGGNTCCCC AGATACAGCG AGATACTCT TAAGGAGACC CAGAGGGCAA  
ATACTCATCT AGTAGAATGG AGACCCAGAG GGCAAATACT CATCTAGTAG AATGGGGACC AGAGGCAGAA ACAGCCTTTC  
AAAACCTTTA AAGCAGGCCC TTCTTNCAG CTCCAGCCTT TAAGCCTTNC CACAGG

SEQ ID NO:1342: (Length of Sequence = 335 Nucleotides)

ACCCTTCCCC ACTCCCTGGT CCCCGGGAGC AGCTCCTTCT GCCCGANTTA CTCACAGTGC AGGGAAAGGA GGCAGGGAAA  
AGACCAGGAT TCTGTGAGTT CTGAGGTTGC CACACACAAA GAAGCTGTGG TTTCTCTGCC TGGCCACTG ATGAGACTAA  
AACTGGCTTC CCCTGGAGA CGGCAGATTT CAGGCTGATC CCTGCTTAAG CCTCTCATC CCCACGCTGG TCCTGTTATT  
GATACAAGAC CCAGCTGGTG ACAAAGCCTC CAATCCTGGG GGTCCACGGA GCCTGGGGCT GANATTTCCA GGAATATCC  
GCCAGTGGGC GCCCA

SEQ ID NO:1343: (Length of Sequence = 379 Nucleotides)

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GAACCCAGGA GGCGGAGGTT GTAGTGAGCC AAGATCGTGC CATTGCACTC CAGCCTCGGC AACAAAGAGCG AAACCTCCATC  
 TTAAGAAAAA AAGAAGGGTG TGATAGTTAA ATTTATGCAT CAACCTGGCT AGGCAATGGT GTCCAGATAG TTGGTCAAAC  
 ATTATTCTAG ATGTTTCTGT GGAGGTTATT TTTTAGATGA GATTAGCCTT GTAAACTGGT GAAAATTGGG TGAAGGAGAT  
 TACCCTGCAT AGTGTGGTGG GTCTCATTAA ATCAGCTGGA GGCCTCAATA GGGAAAAAGA CTCACCCCTNC CCTGGAGCAA  
 GAAGGAAATT CTGCCCAGC AGAAGTTCTT NGGGCAGCAG AATGCAACCA TAAACTCTT

SEQ ID NO:1344: (Length of Sequence = 400 Nucleotides)

GACGGATGGG ATCGGGGCTG TGCTCTGCAG GTCCCTCCCA GAGATGTTGT CATACTGCGA GGGATGCCGC TCGTAGGACA  
 CCTGTCAGCC AGAGCCGTCC GCGTCTGGN AGGCTGCGCT CTGCGCTTC TTCTCGGGGA GAGCAGGTGG CGTATCTNTN  
 TGCTGCCCTG GGGCCAGAGG TCCGTNTGGC TGGGGATGGC CGCCAAGAGG CAGCTGGAAA GGAGGGCCAA GAAATGGAGA  
 CCCAGACTCC CCCAAAGACT CTGGCAACGG GCTAAGGTTT CAGGGCCGTC TGCTGAGGTA TCTGGTCTGC GTTAGAGAGG  
 TCTTNTGGA GGAATTCATA GTCGGGATCA TAGCAGATCT TGTCCCTTT CTATACCATC TGTCTATTT GGAGATNGCT

SEQ ID NO:1345: (Length of Sequence = 347 Nucleotides)

CCTCTCCCC CAAGGAGCTT GCAATTTTAG GAACTAATCC AGTTTGAGGG CTGAATTTAA GTTAAAATCA ATTACTGCC  
 TATGTACTCC TTTTAAACA ACATTAGGTC AAGACCCTTT CAGTGCTAAA TAACTGATT TGTATTATC ATACATTCAA  
 GTTTTATAAA TGTGTTTTTC CTCACCTCAC TGAAATATCA GAATCCAGCT CAAAAACAGA ATCAAAGAGG AGACTTTTTAA  
 GCTTATTCAA TAAAACTAT GGTACGGTAA TATTCAAAT AGTGGAATC ATTATATTAT CTAAAATTCT CAGGAACTG  
 CTTTAACCAT GGATTAAATA ATTTACC

SEQ ID NO:1346: (Length of Sequence = 287 Nucleotides)

CAAGTCAATA CCCATAATTA AGTCAAGTTG CCAGCCTTAA TTATATTTNT NTCTCGCTCG TTCACTCTCT CTCTCCTTCC  
 CTCCTTCCCT CTCTGCCCA CCCCCGTGTA CATTATATAC CAATTCATTG GAGATATATA TATGINTGIN TNGNGTNG  
 TGTGTGTTNC TGTGTGTG TGTTGTGTTAA AGAAGCAGGA TGTCTTACAC AGATGTTTCA TATATTGAGG NATTACAGAG  
 TAATTACAGG GAAAGGTATT AACTGTCT TCAACACCCT AGGCAGT

SEQ ID NO:1347: (Length of Sequence = 295 Nucleotides)

ATTAAACAAC TTTTTTAAAC TTTTGTGCA CAGGACAGAA AACTGCCTGT ACATGCTATG TCCACTTTTG GAACACAGAT  
 TTTTAAACAT TATGAATGCA CAAATCTTA CATATCATGC AACTCTATGC CAAGAACCA ACTTCTTCC ATGCAACAGA  
 TATGAAGATC TAAATGGAAA CCTAGCTAAG TCTTAAACAC TTTCCAGTA GCAAGTATAA TATATGTTGT TGAGGGAAAA  
 CCAGTCTTAA CAATTNCTTG TACACAATAT TCATGTGCCA AATACAATGN CAGGN

SEQ ID NO:1348: (Length of Sequence = 332 Nucleotides)

AGTCCCTGCT ATGTGGATAT TTGGTAGCAA TGAATGATGT GGAACTACA TATGCAGATT TTATGCTTC AGGAAGAACA  
 GGTAGAAGAA ATGCAATACA TGATATCTG GTTTCCTCTG CAAGTGGCAA CAGCAATGAA TTAGCCTTGA AATTAGCAGG  
 TCTTGATATC AACAAGACAG AAGGTGAAGA AGATGCACAA CGAANTTCTA CAGAACAAAG TGGNGGAAGC CCAGGGAGAA  
 GCAGCAAAAT CTGAAAGCTT AACACCCAC TTTGACCTC GGCCACACCT GAAATGTCT CAAATCTCCA GGGNGTATCT  
 GGAATGCAT TT

SEQ ID NO:1349: (Length of Sequence = 296 Nucleotides)

CCCCAAAAA CAATGACACA AAATTCATTT GGTTAATICA TGTAAAGGAA AAAACAGCAA CACCACCACA CAAACAGGAA  
 AGTGGGAGTA TGATTAGGAG GGGTGAGATG AAAACTATTT TACAGTAACA TTTCCACCAA AAGACTGTCC TAAGAACAGC

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CTGTCAATAC AGTTCACAGG GAAAAAGCAA ATGTGGTATT TTTTGTATT TTTTAAAAGC TCCCTGGGTC CCAGGTGTTT  
TGCAGTTTTT AAGGNCCTTAT CTGCTAAAGG AATGCCCTTT TAGGGTCACA GCAGGT

SEQ ID NO:1350: (Length of Sequence = 317 Nucleotides)

CTGTTGCCCA GGCTAGAATG CAATGNCGTG ATCTTGGCTC TCACTGCAAC CTCCACCTCC CAGGTTCAAG TGATTCTCCT  
GCCTCANTCT CCCTAGTAGC TGGGATTACA GGTGTTTACC ACCACGCCAG GCTAATTTTT GTATTTTTAG TAGAGAAGGG  
GTTTACCAT GTTGGCCAAC CTCGAACCTC CAACCTCAGG TGATCCACCT GCCTCAGCCT CCCAAAGTGC TGGGATTACA  
GGCATGAGCC ACTGTGCCTG GGCCAATAAA CTATATTTTN TCAAGCCAAA GTAGGACAAG CACAGTTTTT AAAAGGG

SEQ ID NO:1351: (Length of Sequence = 349 Nucleotides)

CGGATGGGTG GGATGAGACT TCAGCTTTAT TGGAAATGTT TTATTTCTTT ATCTAAAAAA ATACTAGAAA GAAATACAAC  
AAAATGTTAA CAGTTGTTAA TGTCGGCCTC TGTAATATA GATATGTGT TACTTTAGTC TTTTTTTTAA TCTCACTAA  
ATTAAAAAG GAATTTTAGT CTTTTTTTAT CTCACTAAA TTA AAAAGG AATTTTAAA CCCTAGTGT ACATGCAAGT  
GAGTCCAATA ATGGCAAAAT AATAATGAG NTACATAGGA AGGGTGACCT AAATTTTAAAT GGGTGAATAC TGGGTCCCCG  
GTACAAGTTT GANAAATTTT GAATTTCCG

SEQ ID NO:1352: (Length of Sequence = 304 Nucleotides)

TTTTTAACT ATTTAAAAGA ATCCTTAAAT GATGGGTATT CTCTAAAGCA TGCGGGGCTT AAAACCTAGA TGATGGATTG  
ATAGGTGCAG CAAACCACCG TGGCACATAT ATACCTATGT AACAAACCTG CACATTCAGC ACATGTATCC CAAGACTTAA  
AGTAAAAGTA AAAATTAAAA AAGATGGGTA TTCTATATTT ATCTTTTCATG TTACATTTTT CTTGTGTTGGG TTTCTAAATA  
AAACTTGTA CATGAATGTT TTATTCTCAT TCTGTATTTT AAAAGAAGC TGAGTAACAA AAGG

SEQ ID NO:1353: (Length of Sequence = 307 Nucleotides)

CTTAGTCTGA CATTAGGTTA TGAGAAGTAC AAAAGATCCA CAAGTACAAA AAAATCTGTA TAGCTTTGCG GTAGTTGAAA  
AAAATGCAAG AGAACAAAAA AATTTTTTGA GTAATATTCA TCTCTGCAGA TCTGAGTGAC AGTCCGCTTG AAACACCGCT  
GTAAAAGTGG TAAAAAATGA TTTCATTGTG ATTATGTATA AATTTTIGAT GTCTCINTTA CTGTITTTAG GGAATCTGG  
TCTTCCTGNC ATTTATACCT GGATANGTNC CTTCCCTGT AATTTTINCT GAAAGGCTCC AATTTCC

SEQ ID NO:1354: (Length of Sequence = 407 Nucleotides)

GTGAAGTTAA GCAGCAAGGG CTGAGAACCG CTGCTCCAGA GAGGCCAGGA GGTCTGGTCA GAGGCTGGGG CCCCAGCCCC  
CAGGCACCTC TCTGTGTCAG TTCCCTGGA GAAGTCATGA GTTTGAAGAG TAGGCAGAGG CCAGGTGTCA TCACTGAGTC  
ACTCATCAAT GGCCAATGAG AGTNCAAAGG GTAGCTCTGA GCACAGGATG TTAGCAAGA CTCTGGGTT CAGCTCCCAG  
TCCCACCANT GCCAAGTGGG GGATCCTTAG CAAGGTACTT ACCTTTTTNN TGCTCTGTT TCTACGGCTG CAAAATGGGC  
ACAATAATGT CAGATTCATG AGGATAATG AGGACTAAAA TTAGGTAAT TNCCTATAAG CTGCTTCTAA ACGTATTTAC  
TTATAAA

SEQ ID NO:1355: (Length of Sequence = 355 Nucleotides)

ATTACTATTT GCCTCTATAG GAGGTTTCAT TAGGCATCTN CTTCAATTAT AGTGCAATAT AATCAAACAC TTATCAGTAC  
AAGGCAGAGA GACCGGGACT AGCTGCCTAC ACATCCTCAA TGAGCTTTAG GAAATGTGAA GGAAACATGG ACTGAAAATC  
TTCTGGTGGC AGGTACTCTC ATGTGTGTCT CTATCTGATG CTCTCAACAA CCTCTAGGGG TAGATATTGT GACCCCTCATC

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TTGCAGAAGC CTTGGCTCAA GTATATGCTC AGAATCACAG AGCTGGAAGA TAACTTGGG TCTCTCTAGT GCCAGAGNCC  
ATGNCCTCTG ATCTCTCAAG GGCAGAGGTA TTACC

SEQ ID NO:1356: (Length of Sequence = 406 Nucleotides)

TTTTTTTATG TTATTTCACT CTCCTCTGTTA AATTTATCTG ATAGGATTCT GCAGAGAACA AAATTCAACA GGGCCCTGTG  
GAGCAAGGAG CCCCTTTTCC CTATCTCCTT CCTCTAAGAG CTACACCCAG ACCAGCTGGT TATCAGCGGA GGCCCGCTG  
CTCCTCATGA GAACGCTGGT GGAAGACGAA GGTGATGGCA GTGGAGGCAG CATCCCAGGC AGCCTGGAGT ACCTCATCCC  
GGAGCCCCCA CTTATCAGTG CAGTGGTTCC ACCCTGCCAG GGTCTNAAGT GCAGTCAGAA CCATCAGGGG GTNGCCGGAT  
CTGACGGCTG TTNACACAAC GTCGGCAGTG CAAACCTAGG GACAGAAGGC ACANCTNAAG TCACTNCAGA TCCCATCTTC  
CTACTG

SEQ ID NO:1357: (Length of Sequence = 231 Nucleotides)

TTTCAAAAG AATTTATGAT TGCTTCACCA GGTCACTAGT GAGCTAAAGT CAAGGAATGA CTACAATCTT GTAGCAITTT  
AAAGTGATTA GAATTTGAGA AACTTTTACT ACATTATGTG TTAATATCAT AAGAACACTC CTTTGGGGGC ATTTGAATAA  
TAAAAAGNC TACATTCTTT GCACCANGTG NTCATTTTCA CCCACATTCC AGTATTTTNC TCTAACTTGG G

SEQ ID NO:1358: (Length of Sequence = 302 Nucleotides)

CACAACTAAT TTGTAAGCCC CTGAGCGCA GGAAGTGGT TTTTAAAGAA TGATGTATTC TTCACAGTGC TTTCCCTTTC  
TGTTACCCAG GGAGCACATG GCAATATAAG GGCTCCTGGG ATTGANTCTT AAGTACAGAG AAAACCTAAG AATNCTTTTA  
GATAGACAGA TAAGAGACCA CNAGAGAAGA GCAGATTCTA AGGTATNTGT GAGAAACGTT ATGTAATGAA AAGATAATTG  
ATGACACACA CTTCCAGAGN GTGCTGGCGA GATTTGATTC AAAAGCACAC GGCTAGGGCA CT

SEQ ID NO:1359: (Length of Sequence = 356 Nucleotides)

TAATGATGAG CCTCTGGGTG CAGGGAGAGG ATAGGACTTG ATGCTTTCCA GGGGAAATAT TTAATAATTC AGTACTAAGT  
TAAGTCTGTA TCATTTTACT TTTTTATAG TTTCTTATTT TATGTTGTAT GAGATGAAA GCTTGCACAT AAAAGATGAT  
AAGAAATTAG AATTCATCGT TTCTGTTGTA CCAAGAAGAA CCTTAGTGAT CTCTAAAAGA ATGTTGTTTA AAATATGGAT  
TCINCTTTCC TTCTAGTACT CCCCTAGCAT GACANTGAGC GTGTGATCCA TTACCAAGTC TCCTCATGAA AACCACAGTG  
AGTCAGCCCT TCACAGAACT ACTACGGGAG GAAATT

SEQ ID NO:1360: (Length of Sequence = 366 Nucleotides)

AAAATTTAAT TCAACTGACC CATCCCACCG GGAAATGCCA CTAGGAAGGT GTAGCCTGCA GTTTTACCTA ATAAGCACAA  
CTGGAGGGGA ATAGAAACAC AGAATTGTGA GGAATCGCA AGGCATGCTG CTCAGAGCAT GCCTAGCCCT GCACTGAAAG  
CTATGAGATA CTGGTCTGTA GGCATGGCTG TGCTTGCTGG TGGGAGCGGG CATCTCCCT TGGCCTCCCT GGGACACCTC  
CTGTGCTCCC TGCACTGCAC TCCACGTGCC TGGGGTGTCT ACACAACTNG CTGCAGCTTC ACTAAAGAAC AGGTGGCACT  
NCAGCTTCTC CGGGTCTGCT TGAGCACAGG GNCCCGCCAN CCTTGA

SEQ ID NO:1361: (Length of Sequence = 347 Nucleotides)

CCTCCTACTG TCTTGCTGT GGGACAGTTG CCTCCCCCTC ATCTCCAGTG ACTCAGCCTA CACAAGGGAG GACCAACAGG  
NTCTAGTTTT TCCACGTGAT GGAGTTCCAA GCTTTTTTTT TTGTTTGTGT TTGTTTGCAG AAATAAAAAC AATACACATT  
CCAAGAGAAA TGAATGCATC TTTTGACACG TCTCTATTTT TCATTTACAT ATGTACACAC GNCCCTTGAG TCGCTGCTGT  
TGACACGGCC CNGTGTGGAC GGGTCAGGCC CGAGGCCCTT CCGGAGCAGA CCTGTAGCTC TCTGGGGGAT CAGGGCTTCC  
ATTAGGGAGA AAGTATTAGC AGTTTCT

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SEQ ID NO:1362: (Length of Sequence = 358 Nucleotides)

CCATTCATTC ATTCAITCAA CAATATTCAT TCAACAAATG AAGCAAAGGA GCACACAGCC AAGTGATGGA GCAAAATCAC  
 AAATTAAGG GTAATTCAGG CCAGGTGAGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GAGGCGAGG CAGGTGGACC  
 AGCTGAGGCC AGGAGTTTNA GACCAGCCTG GCCAACATGA TGCAACCCCG TNINTACTGA AAATACAAA ACAACAAAC  
 AACATAAAAA AATTAGCCAG GTATNGTTTG CAGGCGNCTG TAATTNCAGC TTAGTCAGGA GGCTTTGGCA NGGGCTTCAG  
 TTAGCCAAGA TCGGACCCCT NCACTTTCAG CCTGGGTA

SEQ ID NO:1363: (Length of Sequence = 312 Nucleotides)

TATTTAAATA ACGTGCAATT TCATAAATCA GCACATTTAC TAGATAGGTA GGATACTTTT NATCCATTG TGTTTAAAA  
 AATTAGCGCA TGTTTCTCTT TATGCCCACT TGTATTAGCA GAATAGTGTT TTCGGATTCC CTGAATGGNT CTGTATTGAG  
 TCTGTATAGA CCCCAGGGA AAAGGAGGAA TTCGCCGTGC CCGAGAATAG CTCGGTCCAG CAGTTTANGG NAGAAATCTC  
 TAAACGTTTT AAATCACATA CTGACCAACT TGTGTGATA TTGCTGGAA AAATTTTGAA AGNTCAAGAT AC

SEQ ID NO:1364: (Length of Sequence = 345 Nucleotides)

CTGACAGATT TACAGATGCT GACCTATTGA AAAATACCAC AGCCAGAATG GGCTAAACAG GTATATAGTT AATACAACCA  
 CCACCATCCT TTACTTTTAA CATAGCTCTT AGTAGGAATT TCATAAANT GGACATCACA GCTAAAATGC ATTATTAATT  
 CTCCTATCTG CTGACAATAA AAAAGCAGCA AACTCACTGA TTCTATTTA AATGCACTAG ATGGGAATAT CATGTTCTAG  
 GGGTGTGTC CTTCAAACCA AACCCACAGC AACACACACA AGCAATTTG GTATCCACCA TTTTAAATTC ACAATCTGAG  
 NCTAAATGAA TGGCTATTTA TATTT

SEQ ID NO:1365: (Length of Sequence = 255 Nucleotides)

CTCCAGAAAG CCATTGATCT GGTGACGAAA GCCACAGAGG AGGACAAAGC CAAGANCTAC GAGGAGGCGC TGCGGCTGTA  
 CCAGCATGCG GTGGAGTACT TCCTCCACGC TATCAAGTAT GAGGCCACACA GCGACAAGGC CAAGGAGAGC ATTCGAGCCA  
 AGTGCGTGCA GTACCTAGAC CGGGCCGAGA AGCTGAAGGA TTATTTACGA AGCAAAGAGA AACACGGCAA GAAGCCAGTC  
 AAAGAGAACC AGAGT

SEQ ID NO:1366: (Length of Sequence = 322 Nucleotides)

AAAAAAAAA TTCAAAGAA ACAGAGTAAT TTTCTCCTT GCCTCAGCCC TAAGTCATCT CCCAGACAAA AAAGCAATCA  
 TCATTGTCAA ATTTAAAGG GAAAAGGAAA GACTTTTATT TGANTGAAA GATTTTTTTC AGTGTGATAG AGAGGGAAGA  
 CTGAAATAAA CAGAATTTAC AACCTTCGCA CCTTTGCACC TTCTCTTCT AGCAGTATGG CAAACTAAAT AACTTGCACT  
 GAAAACGGGT TAAAAAGCTG TATACTTTT TAAAAATAT ATTNGNTTA TGTATTGAT CTGCACAGTT TTGAATACAA  
 AA

SEQ ID NO:1367: (Length of Sequence = 349 Nucleotides)

GAAACAAGG TCAACATCAC TCATCATTAG AGAAATGCAA ATCAAAACCA TAGTGAAATA CCATCTCACA CCAGTCAGAA  
 TGGCTGCTAC TAGAAATAAC ATGCTGGTGA GGCTGCAGAG AGAAAGGAAT GTTTATACAC TGTTAATGGG AGINTAATTA  
 GTTCAACCAT TGTGGTAGAC AGTGTGAAA TTCCTCAAAG ACCTAGAGAC AGAAATACCA TTTGACTGAG CAATCTCATT  
 ACTGGGTATA TAGCCAAAGG AATATAAATT GTTCTACTGT AGAGAAAACA TGATGCAATG TTGTTTGCA GCACTATTTT  
 ACAAGAGCAA ACACATGGGA TCAACTTAA

SEQ ID NO:1368: (Length of Sequence = 379 Nucleotides)

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CTGGGACAGA GACCTTTGCA TTGCTCCATG TGTGGCTTC AGCTGGGACA GAGACCTTTG CATTGCTCCA TGTGTTGGGG  
 CAGGTCTTCC ATTTCAATCT CCTCTGCCCT AATTATTAG CCATACTTGT GCTATTTATT ACTTTTAAAC CCTAATCCTT  
 TTCCGTAAT TGTGTTACAT TTGTCAGAGT GCCAGCATT TACAATGTT CTTTTATGTC TCACAGAGGT CATCATTAAAG  
 TTAGACCTTT GGCTTCATGT GTCTCCCGAG AGATGGTTTA TAAATTTGC ATNCTTCTGG CACAGGTGGT GTGGCTTAGG  
 GATTAGGACA CAGCCTGCCT GAGTTCACAC CTCATCTCTC CCACCTAACA CTGATAATT

SEQ ID NO:1369: (Length of Sequence = 319 Nucleotides)

ATTCTGGTC TAAGTTTTAT TATTTCTTT CTCTGCTTG TTTTAGGCTG ATATTGCACT TCTTACTCCA GTTTTCTAAG  
 GTGGAAGCTT CGACTATTGA TTTCAAATCT TTTTNCCTTN CTAATCTATG CATTCAATGT TATAAGTTTC TGTGAAGCAG  
 TGATTTCAIT GCATCCACA TTTTGATAGG TTATATTTCC ATTTAGTTAC AAATAATTTA AATTTCCCTT GAGATTTCTG  
 CTTGACTTA TGTGTTATTT GGAAGTGTAT TTTTATTCTC CAAATATTTA GAGATTGCA GCTGTCTTTA TGTATTAA

SEQ ID NO:1370: (Length of Sequence = 343 Nucleotides)

GGAAAACATA AATNTTGACA AGTAGITCAA GACTGTTGGG ATAAACTTAG CTAGAGTGCA GGTCACTAAT ACCCATCTTT  
 ATAAGGAAGC TGAAAAGGGA AGTAGAGGA CAGGGAGAAC AATGACTTTN TCTCTCAAGC TTGACTTAAA CCACCAGGAA  
 AGTTCCTTAAA GCCAAAGCCT TTCTCAGACT CTCACCAAAC CATAAGAGTC AGAAAAATGG TCGTTTTCAA AGGAGTAGAA  
 AATTCTGTAC AAAGTAAACA ACAGCTGAAG CAGGAAAGGN ACATACATTT NNTCACTTAG TGGCAGCAG GCAAAACAGA  
 ACATAGGGCC AGCTTGGTTA TTT

SEQ ID NO:1371: (Length of Sequence = 295 Nucleotides)

ATTCTINCCT GGGCGGCGAT GATCTGAGCA ATGCCCCCCA CAACTTGGT TTTCACIACA ACATCGTCGT CATCAGCTTT  
 GCCAAAAGCT GCCTTCTGGG CTGCACGGAC AAGATTGINT GAGGCTCTTT TCACAGCATT TCCTGCCGCC TGTAGCCGCC  
 TCATGGCCTC TNAATCCTGG TCGGCCTTCA CCTGTCAGGC CACCAGCAGC TGAGCCGTGG AAGCGGCGAC CTGCTTGGCA  
 GATGAGATGA GCTTCTCCTC GCTGGCGTGT CCTGAACGG AGGCAITGGC CGCCT

SEQ ID NO:1372: (Length of Sequence = 340 Nucleotides)

TTTGCTTTCA GATAATGTTT CTGTATACTT TATAAATGCT ATCTGTGGTA TCTCCTGTAT AATTNACAAT GTTTCATGT  
 AAAAAACAAA ACCCATAGAC CTTAAAAAAA AGAAAAAAG AAATATACAC TATACATAGG CACAGCTTAT GCCCAGAGCA  
 TAGCAGGTGC ATAAACACT GTTGCTATAA ATGCAAGAAA AAGGTCAATT AACCACAATC ACATTTTTTT NCATAAGNEN  
 GTCTGAAATC TATACAATAT ATACATCTAT GTTCAATGT GGAAATAATA TTCTTTTAAA TTTCAAGGCG TGTATACCC  
 CTGCAAGCCT GCATAAATGG

SEQ ID NO:1373: (Length of Sequence = 315 Nucleotides)

AATCCTGGGG GTGATTTAGA ACTTAGAGGC ATTCTCAAAA TGGACCAAGC TAAATGGTAG CCTTTATTIN CTGTAATGAT  
 TCACCATGGG AAAATTAGTA ATTCTTTAAA CTCTTACTT AATCTTATAT GTATTCCAAA TTNCTTAAA AGAAATTAAC  
 CTAGAGGTTT TACAGAATC CATTTTTTTT TTATTNCCA GAAAGGAAAA ATTTATCTGT NCTGINATTT TGTAAAAAT  
 CCTATTCCAG CTACTACTAT GGAAAAAGGA AAAGAAGAAA GGAGGAAAGG AAGGGAGAGA GGAAAGGAAG GGACG

SEQ ID NO:1374: (Length of Sequence = 327 Nucleotides)

GAGCCAGTGG TGGCCCCCAA CAGCCCAATC TGGTACTCAG TCCAGCCTAT CAGCAGAGAG CAGATGGGAC AAATGCTGAC  
 GCGGATCCTG GTGATAAGAG AAATTCAGGA GGCCATCGCA GTGGCCAATG CAAGCACTAT GCACTGAGAT GCCTTGGCCA

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AAAGGAAAT ATAAAAGAA ATAAATCTC ACATTGGTGC TTAGCAGGAG AATTTTAAA GACTTACAA TCAACAAGCT  
GTTCAAATA ATAATGAATG CTGCAGCTGG CTCCTACATG GGGCTTTNAG TGTCCCANTA GTAGCAGATG TCCCAGTTCT  
ATAAAAT

SEQ ID NO:1375: (Length of Sequence = 338 Nucleotides)

TGCATGGAAA CTTAATCTAT TCAGGTCCCA ACTTTCAGGC TTCTCTGCTC TGACAAGTAC TAGAGGCCAA TATGATAGAC  
TAGTCTGAGT TGGATGCAAG TTAGCCATT CCAGGAATGA TACCAGGATA AGTATAATGG TCGTGAATAT AACCGGATTT  
TAAGGGAGAA TGATTACACC TGGAAACAAA CTGTCAATAC ACAAGTAACT AGTTGTTAAA GATTTCTAAT TTTGACCAA  
GATTTTTACT TTCTGGTAT AGAAATGGAA ATAAACATTN ACATTTAGG TTTTGAAAGC AACCACCTCC TAACACGGTT  
CTGAGTTGGG GGCCAACA

SEQ ID NO:1376: (Length of Sequence = 307 Nucleotides)

CAAGCCTCCC TCAAAAAAT CCCAGAGTA ATGAAAATAC AAAGTCTGCT TGTTCAAAAT TATGGTGCAG ATAAAAAGG  
AAAGGGAGGA AGTGATGGAG TAAAGTTCAG ATTAATAATA AACGGAAAGT CACAACAGTC GAAAGGTGGA AAAAAACCGC  
AAATGCCCAT GANCTGATGA ATGGATAAAC AAAATTGGT GTGTGTGTAT ATATGTGTAC AAATTCCTT TTTATGATGA  
AATAGTATTT CATGTGTGT GCACATGTTN CACACACANT TTAAATAGTA TTTGTCATA AAAAAAG

SEQ ID NO:1377: (Length of Sequence = 353 Nucleotides)

TGGAATACAC TTGTGAATAC AGTGTGTAGG ATACATTAACT AGTTTCTGA GTGGGCTGCT CTTTTTCTT CAATACTGTA  
TATATTTTNN TTAAGCTCTT CTTTAAAAGA TAAATATTT TCATACTTCT CTTAAATCCT CAAGGATTAA CTCTGAGTCA  
CCATTGTGG TATTTTAAAT CTTTTTAAAT AAATCTCTGT ATTTGCACT GCATCAAAAC AGTAAACAT TTCACAGGGT  
AGGATCTGAT GACCATTTTA TAATCAACAT TTTTAGGTAC CACAAGAG ACITTATGAG CATCCACTGA AATTATGGGC  
ATTATGTCAT ATAAATATCC AAAAATCCAT TTT

SEQ ID NO:1378: (Length of Sequence = 315 Nucleotides)

GATTTGGCAA ATATTTGGGT GAGATTTGAA AATAAATTAC ACCACTGATG CACAAGTTAA TGTGAATCAA GCATCTGTTT  
ATTCATTCA GTTTATGCCT TTTTCTCTT TTTTGTGCAG TGCAGTTGGG GTCACAGACT CTCAATTTGA CAAGACACTT  
TAAAAGCAGG AGTAGAAATT AGGCAAGGT TTTACAATA TTACAGGAAC TGTCATAACA AACTTCAAGT GGATCAGTTT  
ATTTCTGATT TAACTGGGG ATAAACAGTG TTCAATATTT TCCAAAAGAT TCTCCCCATA TAGAAGTCCC AAAAG

SEQ ID NO:1379: (Length of Sequence = 352 Nucleotides)

ACCGCAAAT TTAGCTGTTT ATTAGGTGTC AAGTCTCTCC TTCTCTCCCT GCTTCTCTT TCTNCTTTT CTCCCCACAA  
ATCCTCTCAA AACACATACA AAAAGAGAAA ACTAGAAGCA AGATTGGGTC AAACATGAAG AACACAGAAA GCTATTAAAA  
TAGCTAGCTT TAAAGGGCTC TTTTTCAGTT TGAACAAAAG TAAACGTTT TCAAAAGCAA AAACAGAAAA CAGAGCTTCC  
ACCCAGATTG TGCAACTTAA TGAGAGGAGG TTAGTGCTGA TAAACCCATT GTGAAATCTA TTATAAAGTG ACAGGTTTTT  
CAAGCAAGGA AATCCAATCC AGTTGGGGT TG

SEQ ID NO:1380: (Length of Sequence = 261 Nucleotides)

AAAAATTAG TGAAGACGTG AATAGATATT NCTGCAAAGA AAACATACAA GTGGTCAATA GGTATATAAA AGGTATTCAA  
TATCACTAAT CATCAGGGA ATGCAATCA AAACCACAAT GAGTTATCTN CTCATACCTT TNATGATGGC TAATATTAAN  
CGAGAGATAA CAAGTGTTTA TGGGGGTGTG GNGAAAAGAG AATGTTTGAA CACTCTTGGT TGAAATATAA GTTGGTAGAA  
CCATTATGCA AAACAGTATG A



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SEQ ID NO:1381: (Length of Sequence = 273 Nucleotides)

GCCACTACAC TCCAGCCTGG GACACAGAGC AAGACTCCCT CCCAAAAAAA AAAAAAAAAA TTATTAGAAA GAGGAAGAGA  
 GAGATGNCAA AGCCTTTTAC AGTTGGGTGT TGGNGTITAG AGACCCAGTA CCCAGCCTG ACATACCTAC AGAAGCAGTG  
 AATTTACTTA TTTACTGTIA TGAAAAAAT AGATGCTGCC AGCCGTGCAC AGCAGAACT ACTATTGANT CATATGGTTT  
 TAGCCTTCAC CTTTAAATAT GTCTAATTAT ATG

SEQ ID NO:1382: (Length of Sequence = 296 Nucleotides)

CTCCACAGCT GCCACATAGA ACAAGCAAAT CTGACATCAC AGCTCTTTTA AAAATCTCCC AGAATTCTAC ACTGGAATAA  
 AGATCACCCA GTAAACTCAG CTATGTTGAT TCGTAGGAAT TTCTCCTTGG AGTTAATAAT AATCATTAGA AAAAAATAC  
 AGGAAGAAAT AACTTCCTCC TATTCTTATT GTGATAAATT GTAACAATAG CAGACATTCG TATATAGATC CTATAAGCGA  
 CAAGAGGGAA AATAGGATTT GCAANTTAAG CATCTGGAAT AAATATTTTA GGAAAA

SEQ ID NO:1383: (Length of Sequence = 293 Nucleotides)

CCAAGGACCG GCGCTGCGG CTGCTCTGGG ACCGCTTCGT GCGGGGCTGC CGCGCCGACT GGTACGGAGG CAATNACCGC  
 TCGGTCTCTT GCTCTGACCA CTTTNCCTCA GCGTGTCTT ACCTCTCTTC GGTATCCAG AAGAACCCTG GCTTCTCCCA  
 GCGNCTGAGG CTGGTGGCAG GCGCCGTGCC CACCCTGCAN CNGGTGCCCG CCCCGGCACC TAAGAGGGGA GAGGAGGGAG  
 ACCAAGCAGG NCGCCTGGAC ACGAGAGGAG AGCTTCAGGC AGCCAGGNAT TCT

SEQ ID NO:1384: (Length of Sequence = 378 Nucleotides)

GGTGGTTTTG ACATGTAGAA AATAAGATGG AAGGCTGAAC TAGGGCAGTG GTGTTGGCAA ATAATCAGAT TTCAGGAATA  
 TCACAAAGTG AGNGCCCGAG GATTCTGAC CATTTNATG TAGGAATAAG GGAGGAGCCT AGGATGACTC CCCCAGTTT  
 CTGGCTCGAG TAACTGGGAT ATCAACAAGT CATTTAGCAA AATAGAGAAA ATAGGAGAAG CAGCAATTTG AGATAGAGAT  
 AGAGGCAATA TAAAGNNTTA TATATTGACC ATGGTAAATC ACCTAAATTC AGAAAGTTGT AGAAACTTG GGTCTGGANC  
 TCAGGAAAGA CACTGGATAT GTAGATTTGG AAAGTTATCA ATCTCAAAGT GATTGCTT

SEQ ID NO:1385: (Length of Sequence = 204 Nucleotides)

TCATTCTTGG GTGTTTCTCG CAGAGGAGGG NTTTGGCAGG GTCATAGGAC AATAGTGGAG GGAAGGTCAG CAGACAAACA  
 AGTGAACAAA GGTCTCTGGT TTTCTAGGC AGAGGACCCC GAGGCTTCC GCAGTGTGTG TTTCCCTGGG TACTTNAGAT  
 TAGGGAGTGG TGATGACTCT TAACGAGCAT GCTGCCTTCA AGCA

SEQ ID NO:1386: (Length of Sequence = 238 Nucleotides)

CCCCATCATG GGCAGCCAGA GCTCCAAGGC TCCCCTGGGC GACGTGACCG CCGAGGAGGC AGCAGGCGCT TCCCCCGCGA  
 AGGCCAACGG CATGGAGAAT GGCCACGTGA AAAGCAATGG AGACTTATCC CCAAGGGTG AAGGGGAGTC GCCCCTGTN  
 AACGGAACAN ATGAGGCAGC CGGGGCCACT GCGATGCCA TCGAGCCAGC ACCCCCTAGC CAGGGTGCTG AGGCCAAG

SEQ ID NO:1387: (Length of Sequence = 295 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTANITAG GCAAGAAGAG GTGTGAGTAA TTGAGGAAAA ACTGACAGAT GCTTTTCCTA  
 ATACCAAAT TGAGCTTACA ATTAGGAAT GAGTATGTGT AACAGGNTAC AGGTGACAGT GAAGATAGAA GAACCACGNT  
 GACCACAGAC TCAATGTGCT CTGTAACATC GCACAGTTTA CCCAGCATGA CTTTCCTTAG GAGGCCCCCT CCTCACGCTA  
 GAGTAAAGT CCCAGTTAAG TGAAGCCTAC CAGAAGAACT AGTAGAAGAA GCTTT

SEQ ID NO:1388: (Length of Sequence = 201 Nucleotides)

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GCTAGINATC TCTCAGACAC TTGGTCGGTA GAAAAGATCC CGCACCATCC TCCAGGNTCC AATGGCCTTG GAGAGAGGGC  
 TGCAGGGCCC ACGGNCATTG CTGACTCTTT AGAACGTGCT GACATGGAGC CAGACCACTC GGCCCTGAGT GCGGCGAGGA  
 CCCINTTTINT GGATGTGGAG GAGCGCGGGC CGGAGCATTG T

SEQ ID NO:1389: (Length of Sequence = 399 Nucleotides)

GGTGCCCTGT TATCTGGTAA AAGAGCCACT TATGACCTCA GGTGCTACTT AACCTGGGGG GCAATTGTTT CTTAGGCCTA  
 GCAGATGTTT GGGATGACAC TAAAACTCA GTGGTGAGAT GATTCCCTTA GCAAGATTGC TGAAGTTAGG TTTAGACGTG  
 GGAGGGTGGG TATGTGAGCA ATGGTGCCAA TAGCGGCTCT TTATTTCCTT TGTCTCATT ACTGCCATCA GGAAGGTGCT  
 ACTGGCCTCG AGCCAGGGTG TTCATAATCT GGCCTTGGGT TAACCAGACA AATAGAACTT CTTTCTCTAG ACTGTTGGCT  
 TTNTGGAGGT TGGCAGCCTC TATCACAGGN TAAATTTTCC CAAATCCATT TACCCAGTAT ATTCACTACA ATTTTTC

SEQ ID NO:1390: (Length of Sequence = 381 Nucleotides)

GGATTGAGGT GAAGATACAA CAAAGAAAGG AAATTGAACG GAATTATTAA GAGGGTCAAG TTTGATAGGC AGATAAGACT  
 AGGTATCAGC AAGACATTTC AAACAAAAGG AACATTATGT AATTTTTTAA AAAAATACAT GAAAATAATA TTTAANCAAG  
 GAAGGAATAT GATAAAGAN GGATAGTTAG TAAATTTGG ATAACATAAA GATTATTGAA TCTCCAGTCG TCAAATTTAT  
 CCTAAACTAC TGGGAGAGG TCTCATGTCA GATTTTGATT ATCGAGAAAG AGGGGTCAAG AGTATAAGNG AAATTCCTTT  
 TTGTTTGA CTTCCAGTGT CCNCTATTG TGGGCAAATA TCAAATCAA ACCAAATATA C

SEQ ID NO:1391: (Length of Sequence = 327 Nucleotides)

GAAGAAGTCC TTCTAAGCA AGGCTTACAG ACTCCCAGG AGAACAAAT CTCTTTATCT CTCTGGGGTT TTAGGACCCT  
 CATCAAGTCA TAGAATTGAA ATAGAGAACA TCAATTGTNC AACTTTTTAA TTTTAATAGT TTTTGTAGTA CATAAAAATC  
 ATGTTATGAA TTATTTTGTG GTTTTAATTA TAACTTTTTT AGCACTTTTA CCATATTCTT AAAAAATAAA AATTATGAGT  
 NCTGAGAAAG CAGTGAATC ACATATAGGT ATTTGATTAA CTTTATGTG ATCTTTTACC TCAAGCTAAT GTTCTTAA  
 ATCAAGG

SEQ ID NO:1392: (Length of Sequence = 223 Nucleotides)

TTTTTTAATA TTTAAACAA TTTTATTCAT GAAAATATGC TGTACAATGC ACTCTACACA GCCTCGACAC GGCACACACG  
 CACACGCACA CTCTGACGGC ACGGCCACGG TACACTGCCT ACGATACGCG CCGGGGACGC CGCGCCACC GCCCGTCCCG  
 GCCCGACACT TATAAATATG GGAGAAGGGC CAGAACTGNC GCGGAGAAAG GGGCGTCGGG GTT

SEQ ID NO:1393: (Length of Sequence = 296 Nucleotides)

GAAAGTTTAT TATTTCCCAA TGTCCTTAC ATTTNCATTT GGAAATATCA TTCCTGACAG AAATAGNTAC ATTATACCTT  
 CGAAAGCAGA AAGATCTTAA TTAATTAAAA CAGTTTACAT TTACCTTAGC ATTAGGTCTG GCTGGCTAAT TTCAAAGGAT  
 TAAAAATTGC ACCNATTTGG GCCAACTGGG GTCTGAATA ATTATCCNGG GTAAAAGTAT AATATTTTAT ACTTTTATACA  
 TTTTGCTTCA TCACACATTT ACTTTCCACA CAGTGNICAA CTTACATTT AAAAAG

SEQ ID NO:1394: (Length of Sequence = 281 Nucleotides)

ATCTTTGCAT CCCTGGGACG ATTTCCAGTT GAGCATGGTG AATAATCTTT TTGATAGGCT GTTGGATTG AGTTGCTAGT  
 ATTTTNTTGG GGCATTTTGC ATCTGINTC ATCAGGATA GTGGCCTTCA GCTTCTTTT CGTGTGTGTG TGTCCCTGTC  
 TTGTTCTGGT ATTGGGGTAA TATTGGCTT GTAGAATGAA TTTAGAAGAA TTCTTTCTT TTTGATTTT TTGAATAAT  
 TTAAGAAGAA TTAGTATTAG TTCTNCTTAA AATGTTTGGT A

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SEQ ID NO:1395: (Length of Sequence = 323 Nucleotides)

CTTTTTTTTAA GATTTCAAAC TGGGTTACAC ACTGGAAAAG GCTGGGTAA GGGCCGAAAT TTAATAAATC TGTAAGTATA  
ACTAAAGGCT ACAGAGATTT CATATATTTT TTTTAACTTT TAGAAATCAG AGTGCTTATA AAATGGCTGG CTCATGGCTC  
TGTCACCCAG CATCTCTGAC GCGCCTCCT AGCCTTCGTT GGTGAGATAA CCNGGNATAG TGATTCCATG CGTAAACAAC  
AAGAATACTA AACCAATAAA ACTAGCTTAT CATGCAAATA TTANGGCATC TAGAAAGTCA GTTAAAATAA TATTGTCATA  
GAG

SEQ ID NO:1396: (Length of Sequence = 384 Nucleotides)

TGCTCCCGG GTTCATGCGA TTCTNCCGCC TCAGTCTCTT GAGTAGCTGG GATTACAGGC ATGCACCACC ATGCCTAATT  
TTTGTAAGTA TGCCAGCACT TTCTTAGCAA CCCCAGCTGG TGCTCTAGTA TGCCCCCTCC AGTCCACTGT CTCTGGGCCC  
AGTTCAGCGC TAGGACTTGC TTAAGAGTTT CAGTCTTGT AGCCTTACT GCTTTNACG TTTATTTAGA GATCTAGAGC  
ACTTTAACC TCAGTGGCAA GGTGTGTTG AACTTGAGTT CGGACCACTG GGATTGGCAA ATTCCCCTCT GGGCTAGGGT  
TGCTTTAAAT GCTCCCTTCA CGTGTGGGCA ATCAGCTGAG TTGGTCCAG TTTCTTTT TGCT

SEQ ID NO:1397: (Length of Sequence = 370 Nucleotides)

TTGAGTTTNT TCAGTGGCAT CCCCTGCTCC CCGTAGCACA CACAGTGTTC TCTATTTATG ACTGTAGTGC CAAGCAGAAT  
TTCCATGTC TTGCTAGCTG CCCATTCTCA CCCCTCAGGG TCTCATACTT CTCCCTGGAA GCCTCCCAAG CAGTCAATGT  
GACAGGGACC AAGTATGTAC AAGGCAACAT ATTGGGTTC AGTGCAAACT AAGGGAACCA GGGCCTGTTT TTCTAGTTG  
GAAGTTTTTC TTATCTCTAA GAAAAGAGAC AGACCAAAAC CAAGAAGATC AACATAACT CTCTCTTTG TCATCAGGT  
GATGACATCA AGTACTGAT ATTAACCAGA AGTTACAACA AGAAGGAATT

SEQ ID NO:1398: (Length of Sequence = 307 Nucleotides)

ATCAGCATTG GGTTCACACC AAAGTGATAC AAGTCTGAAG GTCTTCATCA GCAGTCTCCC TCATAGTCAG CGCCATACCG  
AAGAGGCCTG TCCTCTCAT AGGGCCTTCC AGCCACTNCT TCCCCACAGG CCGATTCTN CTGTGGCTGG GAGTGTGGAC  
TGATTGTGA TGATGTGAGA GATCCCNNGG GGTGTGAGCT ACCGCACCTG GCTGAACCTT CAAGGAGAAG TTTGTGCATC  
ANTTTTCAAA AATTATGAT ATCAAAAGAT AGCTGTGCCC TACATTGGG AAAGATACAA AACTTG

SEQ ID NO:1399: (Length of Sequence = 380 Nucleotides)

CTGAATTATT GAGGATGAAT TGATAAAGAC AGGTGTAATG AACTGAGGCC GGGCATTAGA CTGAGCAGCT GACTGTCCCT  
CAGAAACCAT AACCTTGCTA CCGCATTGG GCATTGTGAC AACTGTTGAC ATCAATGCAG ACTGCAAGTN AGTTGGCAAA  
GCTGCTGATG GTTATGCTGA AGTGTGATG GGATTGGAAG TGACAAATAC AGTTATTTGA TTTGGGGGCA AGGGAGTGA  
AATGGAGGAA GAGCTAACAG GTCTTGACAT TACTGGAGGG ATGCTTGGTG CAACGTTAGA ACTGACCTCA CTCAATTGG  
GGATGCACAA GGGATGAACA CAGCTCATT CTGTNAGGT AAGTTTAGGG AATTAGAAGG

SEQ ID NO:1400: (Length of Sequence = 232 Nucleotides)

ATTATAGATA CACACCACCA CACCGGCTC CTCACATTAA AGTGGGNITA TGACCATGAA CACTTCGTAT TAATAAATGT  
CTCAGCACAC CCAAGCCTGA AAATCTGATC TAAACCTCCT TAACTTGAAT TCCATCCACA ATCCACAACCT TNCCTGGNAA  
AAATNTNTCC CAGCTTCTCC TTCTCTAGC CCAAGAAACA GCCTTAACAG CGNGCGATTT CATTCTTACA CT

SEQ ID NO:1401: (Length of Sequence = 349 Nucleotides)

AAGCTAAATT TATAATGAAC AGATTGAAGA AAAATAAAGA GCTACAGAAA GTTCAGGATA TCAAGAAGT CAAGCAAAAC  
ATCCATCTTA TCCGAGCCCC TCTTCAGGC AAAGGGAAAC AGTTGGAAGA GAAATGGTA CAGCAGTTAC AAGAGGATGT

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GGACATGGAA GATGCTCCTT AAAAATCTCT GTAACCATTT CTTTATGTA CATTGAAAA TGCCNTTGG NTAATTGGAA  
 CTGCTAAATT ATTTTATTTT TTACATAAGG TCACTTAAAT GTAAAGCGGT TAAAGACAT CTTTNCINGC ATTGCCATCT  
 TAATATC AGATATTACG GGATGTTAG

SEQ ID NO:1402: (Length of Sequence = 338 Nucleotides)

GTAATTGCTA TTGATGTTA TTTAAGAAA TTAACCCTTA AAACTTAAT TCCTTAAAC AATCTCAAAC AGAAGAAGCA  
 AAAGCTTGTT CTGTGCTCCA GGAAATAAGA TTCAGCACCA ATGAAAATAA ATTATAGAAA ATCAGAAGAT GGGTCAATAT  
 GAGTGGAAAA AACCTAACAT TTTAATTGTT TTTNCTCTCA ATAATTGTGT TGAACCATCC AAAAAAGTAT GATACAAAAA  
 TAGCACTATA CTAAGAGCCA GATGACATGT CCTTAAAGCC TTAGCTCTGC AAATTATTGG TTGTGTAACA CTAGGNGACA  
 ACACTTAGNC TCTCCTAG

SEQ ID NO:1403: (Length of Sequence = 381 Nucleotides)

GGAGTCTCAC TTGTTGCCC AGGCTAGAGT GCGANGCGT GATCTINGCT CACCACAACC TCCATCTCCT GGGTTCAAGC  
 GATTCTCCTG CCTCAGCCTC CTGAGCAGGT GGGGTTACAG GTGCCGCCA CCGCACCAG CCAACTTTNT GTTCTCAGCA  
 GAGACGGGC TTGCCATGT TGGTCAGGT GGTCTGAAC TGACCTCAAG TGATTGCCC ACCTTGCCA CCCAAAGTGC  
 TGGGATTATA GCGTGAGCA CTTCACCTG GCCTCTAAGC TTAATCATTT CTAGGCTTTT NATTTAAAGT GAGAAACATG  
 TGACTCTTC CTTCATTG GGACACTTA AAAGGGGTTA TTAAATTGAC CCTAATTACA A

SEQ ID NO:1404: (Length of Sequence = 325 Nucleotides)

AGCTCATCAG CTATCATTTG TGTTAGTGA TTINATGTAT GGCCAAGAC AATCTINCTT TTTCCAGTGT GGCCAGGGA  
 AGCCAAAAGA TTGGATACCC CTGACAGGAT TCCAGGATTC TTTTGTAAT NCTCAGAGGC CCTCTGTGCA TACTCGTAA  
 GGACTATCCA CATTCTTTAT TACTTTTATT GGCAATAGGT ATAAATTTT ATTGTTGNN TATTTTACTG NAATGTTACT  
 TGTTTTTGCT TATTTACTGA TTGGGTGGGA GGAAGTCAAA GGATGAATAA ATCTAACNT TTTTAAAAG GAAAGGCTAA  
 AAATA

SEQ ID NO:1405: (Length of Sequence = 349 Nucleotides)

GGATTATGAC TGAACGTCCT CAGCATGTTG GCCTTCACCC CTGGCGGTGG CTGGAACACA AAGATGCGGC CCGCAGGAG  
 CAGATTCACA GGCACCTTGG GGTGATCTC CATGGTTAGG AAGAGTCGGA AGCAGGCATG CCGCTGCAGG GAATGCAACT  
 TCTTCTCCAG CTGCATCAGC CACCCTGGGG CCAGATGCAC ATTCTTCAGC ATCACCACC TGCCCGANTT TACAAGCGGT  
 GTTTTATTGC CTTATCTGCT TNGTTAAAGC CTTCTTCAGA GCGATTGCA ATTGAAGGGA TCTTCGGGT TCTNCTCGGC  
 TNCAAAGGTC CTGACAATG TTCCCTTG

SEQ ID NO:1406: (Length of Sequence = 392 Nucleotides)

GGACTGCCCG TTGTTTTATG AGACAGGGTC TCATTCTGTC ACTCAGGCTG GAGTGCAGTG TCATGATCAT GGCTCACTGC  
 AGCCTCGACC TCTCAGGCTC AAGTGATCCT TGCATCTCAA CCTCAGAGT AGCTACGACT ACAGGTATGC CCCACTATGC  
 CTGGATAATT GTNCCTTTTT TTTTTTGGT AGAAACAGGG TCTCATTCTG TTGCCCAGGC TAGTCTCAA CTGCTGGACT  
 CAAGTGATCC TTCCAACCTG GCCTCCCAA GTGCTGGGAT TACAGATGTG AGTCACAATG NCCAGCATGG ATTGTCCTTT  
 TCAGACCCAG ACCAAAGAAC AGGACTTATT TGTCCCAAGA CCAATCTAGG NAAAGTATAA GCTGTGTTGT CA

SEQ ID NO:1407: (Length of Sequence = 362 Nucleotides)

GTAAATTGGG NTTACAAGC AATAATTTCT CCACAACAAA AACCACAACT TGAAGNGAGT TGAAAAGNGN TCAATAGTGG  
 AAACAGTCGC CTCAGTACTT TNCITTTCTG GNTTTCATCT CTAGAAATTT NAAGTGTTN AGNCAGAGTC CACCCTTTGT

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GCAAGGCGNG AACCNATGAA TGGACTCCTT GTGGAATTA TTGCATCTTC TTCCAAAGCA GGTTCATCAA GACTTTCACA  
GAGATTCAAT TTINTTGAGA AGTAAGGGTT AATAGGAGGA TAGAATTTGG TTCCNAATCT AGTGNTAAAA GTGTCCAAGC  
AAATCAAAAA GTAAGATATT TTAGGGGCCA TACCCACATC TT

SEQ ID NO:1408: (Length of Sequence = 388 Nucleotides)

CCCCGCAGCA CCACGAGCTG ACCTCGCTCT TCGAGTGTCC GGTCTGCTTT GACTATGTCC TGCCCTCTAT TCTGCAGTGC  
CAGGCCGGGC ACCTGGTGTG TAACCAATGC CGCCAGAAGT TGAGCTGCTG CCCGACGTGC AGGGGGGCCC TGAAGCCCAG  
CATCAGGAAC CTGGCTATGG AGAAGGTGGC CTGGGCAGTC CTGTTTCCCT GTAAGTATGC CACCACGGGC TGTTCCTGA  
CCCTGCACCA TACGGAGAAA CCAGAACATG AAGACATATG TNAATACCGT CCCTACTCCT GNCCATGTCC TGGTGTCTTC  
CTGCAAGTGG CAGGGGTCCC TGGGAAGCTT TGATTGTCCC ATNINAATGG AACGGCCAC AAAGAGCA

SEQ ID NO:1409: (Length of Sequence = 348 Nucleotides)

CAATGAATC CTTAAGCTTT GTTAATATGA GAATGTCTTT ATCTCTTCTT TATTTCCAAA GGACAGCTTT GCTGGTTAAA  
ATATTCTTGG TTAAGTTTGG TTTTGTAGTAC TTAGCATATA TCATTCCACT CTCTCCTGGC CTGTAAAGCC TCTGCTGAAA  
GATCCACTTC TAGCCTTATG GAAACTCCCT TCTATGTTAT TCGNTTCINC CTCTGTCTGC TTCCAACATC CTGTCTTTGT  
CCATAATTTG TAACAGATTG AATATAATAT GAATTAGNCC TCTTTAGACT GAATCTCAT TGGAGCTTTT CACCTTCTT  
GTTTTGGGT ATTTAINTCT TTTACAG

SEQ ID NO:1410: (Length of Sequence = 370 Nucleotides)

GACTATTTAT TCTGCCTTAA ATCAATGGCA AATAAGTCAA GATGACATTT TGTGAATGTA GACTATGGAT ACACTCCTAA  
TAGATTGATG TAGTCATAAA AGGGGGTCAA GTAGATGTTT TNCGTGTTATG TAAGCAATAA TTTTCCCGTG TCTTATTGAG  
TATGGCTAGC GATTATTTAT TACATGCTAG ATGGGTCTT TGATGTGGG TTCCATATAG GTGCAGAAAT TTCTCAGCC  
ACTGGAGGGA TTTCGACCAT ATTTGTCAAT TGGATGAGCT GTTATTAGAT TGAAATCTAC ACATCATTTT ATTAAAAATT  
GTGCCCTAGA AAACGCAAAG CTNTTGACA ATGGCGATTA AAATTATGGG

SEQ ID NO:1411: (Length of Sequence = 385 Nucleotides)

GTCTCAAAC CTGACCTCA GCGATCCAC CCACCTCAGC GTCCCAAAGT GCTGGGATTA TAGGCGTGAG CACCGCACCT  
GGCCTATGAG TGGTCTTTTA ATTAGGAAAT TTACATTTTT ACATTAGTGA GATTGGTCTT TTGGGCTATT GTACTTTTTT  
TTTTTTTTTT TTGAGATGGA GTCTTGCTCT CTCACCCAGG CTGGAGTGCA GTAGTGCAAT CTGGCCACAC TGCAACCTCT  
GCCTCCTGGG CTGAGTGAT TCTCTGCCTC AGCCTTCCAA GTAGCTGGGA CTACAGGCAT NTGCCACGC ACCTGGGGTA  
ATTTTNGTGG TTTTGTAGTAG AGAATGGGGG TTTTGCTAAT GTTTGGCCAG GCTTGGGCTT GAAAT

SEQ ID NO:1412: (Length of Sequence = 337 Nucleotides)

CCATTGAGAT TCCTCCTGGG CCTCCTCGCC CCAATTGCGA CAGATTGCT ACCTGCTCCA GCTCAGCGAC CCTTCCCTCT  
ATGATGAAGT GCATGAAGA GAACAATGGT GTGGACAAGA GGATCAGCAG GTTATTCTC CCCATCGGGG CCACCGTGAA  
CATGGACGGA GCAGCCATCT TCAGTGTGT GGCCGCGGTG TTCAATGCGC AACTCAACAA CGTAGAGCTC AACGAGGAC  
AGATTTTCAC CATCTAGTG ACTGCCACAG CGTCCAGTGT TGGAGCAGCA GCGTNCAN CTNGAGGGGT CCTCANCATT  
GCCATTATCC TGGGAGG

SEQ ID NO:1413: (Length of Sequence = 367 Nucleotides)

ATAAGTGGAG TGAAGAAATT AATGCATAGT TCAAGCCTAA ACAATACAAG CATCTCAGC TTTGGAGTCA AACTGAAAA  
TGAAGATCAC CTGGCCAAGG AGCTGGAAGA CCTGAACAAA TGGGGTCTTA ACATCTTTAA TGTGGCTGGA TATTCTCACA

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ATAGACCCCT AACATGCATC ATGTATGCTA TATTCCAGGA AAGAGACCTC CTAAAGACAT TCAGAATCTC ATCTGACACA  
 TTTATAACCT ACATGATGAC TTTAGAAGGC CATTACCATT CTGACGTGGC ATATCACAAC AGCCTGCACG CTGCTNATGT  
 AGNCCAGTCG ACCCATGTTT TCCITTTCTAC ANCAGCATTG GACGGTG

SEQ ID NO:1414: (Length of Sequence = 360 Nucleotides)

GTATACAGCG TGGTCCAGCC ACCCGACAGC GAGATGGGCA TTTTAAGAAA CGCTCTCGGC CAGATCTCCG AACCAGAGCC  
 AGAAGGAATC TNTACAAAA ACAGGAGTCA GAACAAGCAG GGGTTGCTAA GGATGCAAAA TCTGTGGCCT CAGATGTTCC  
 CCTCTACAAG GATGGGGAGG CTAAGACTGA CCCAGCAGGG CTGAGCAGTC CCCATCTNCC AGGNACATCC TCTGCAGCAC  
 CCGACCTGGA GGGTCCCGAA TTCCAGTTG AGTCTNTGGC TTCTCGGATC CAGGCTNAGC CAGACAACTT GGGACGTGCC  
 TCTGCATCTT CAGACAGAAT TNCTAGCCTG CCTNAGGAAA

SEQ ID NO:1415: (Length of Sequence = 314 Nucleotides)

CTCAACACA GCATTTGAAG TCTTAATATT TTAGTACATA CTATACTATC TCINCTTACA ATTGTTTTTT GTTAAAGAAA  
 CCAATGTTTTT NATTTCTAAG AGTTTCCTTT ACTGTGGATT TTAGTGATTG CATCTTTGTT GATGGGTTAA GATTGTCCNN  
 ATAGCAT TAGTNCITTC AATGTGCTGT ATTCACTGCT GCCTCTGGGC TCCTAAACTG TGGAGGGCTG TTTGTCCCTA  
 TTTAAATGG GGACAGATTG TCTGTCTTTT TAATTTTCAA TGCCTGACTT TTACCCNCTA ACTTTTCCGT AGAT

SEQ ID NO:1416: (Length of Sequence = 370 Nucleotides)

TTCCATTTTT GCTCCTTCTC AGGATAATAG CAGACCGGTG ATCACAACCTT TAGTTTTGAT GAGATAACCT CCTTATCTCT  
 TAAAAATGGT CTCATTATT TTCCAAGAGA AGACCAGTAA AACTAAACA CCTGCCTTGA TCTCAGTGTC TTAGATGTTT  
 TCTGTCTCT CCTTTATCCT AGCAAACCTC CCAGGTGTCT ATTCTTATTC CCATTTTATA GATGGGCAAC TGGGTAAGAG  
 AGGTAAGCTT GGTGAGGTCA CTGAGATAGT GGGGAAAGGA GCTTGGTTCA CATCAGGTAT GCATTCCTCC AAGGTTCCAC  
 TGGGGCATCT GAAGGAAGGG GTTCTGGAA GTGCAAAATA TAGGGTACTG

SEQ ID NO:1417: (Length of Sequence = 365 Nucleotides)

GACTCCTTCG CCAAGGGAGC CATCAGCAC AGTTGTTCCT GAGCAGCCAC AACACCAGTG ACCTCCCTTC TGCTTCGGGC  
 CAATCCCGAC AGAGCCTCTT CCGAGTCTT GAGCTCCTGG ATAGCTGCCT CAATAAAGCA GGACTCGGGA GTGTGCTTCT  
 CCTCTGCCAG CTGCTGCTCT AGTGCTACTT TCTCCTCCAG AACTACCCGG TGCAGCACCT GCTCCTTAGA GGCCAGCAGC  
 AACTTGGAGT ACTGGCTGTG CTGTTTATCT CCTAGATGAA TGGGATGGTC TACATTTCATC CATTTGGGAT TTTGGGCAAA  
 AGCCACCAAC AACCCCTTTT TTTCCCTCTT CAATCAAGCT GCAAT

SEQ ID NO:1418: (Length of Sequence = 354 Nucleotides)

CCAAATCCTT AAGTTTACAA AGCTGTGGGA AAACCTTTGTG TCCTGATTTT AACAATCAGC CTTTGTGTTGA AAGATGAGCC  
 AAGCTCACAG AACTAAATT TTATGTCATG CCATAAGCTG GAGAGGAGCC ATTTGGCTAC AGCTGCGGAA CTTCATTGAG  
 GAGCAAATGA AAGGCACATG GACGAGCAG CTGGTGCACT TCATGTTCTT CTGCTGTG AATTGAATAC TGTCCTGGTA  
 GCAGTTTGG GTGGTCAGG AGCTCAAGGC TGGTTTGTGT GGCTGACTAC GGATGAGCAC TGAAGTTGCC TCAAAGAATT  
 AAGGGGTGTC CACANCAGCC TCTTGGGGTC TTTT

SEQ ID NO:1419: (Length of Sequence = 363 Nucleotides)

GTGGAAACG TGGAAATGAT GTGGCCACTG AAAGAAATTC AAGACAACTG AAACAACCTG AGATTTCCAT TTTCAGCTCG  
 TGTCTTCTTA TGAACAATAA CATTGCAGAA GGGGAAATAT CAGAAAGTTG ATTGATTTTT AACCCAAAA TAGAACTTTT  
 TGTAAGCTAG GAAAGCATCT AAAATTAACA AGAATACAAA AATGCACCTT TGTTTACATT TGCTCTATTT AGATCTTACA

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AGAGATTATG TCTTGAATCT ATCTGACTT CAGCAAAGA CAAAGAAGC TTGAAAACAT CCTATTTCCA AATCGTTTAC  
AGGAAGTTAC CTAAGGAGNC TGACAGATTC AACGGCTGCT ACC

SEQ ID NO:1420: (Length of Sequence = 326 Nucleotides)

GAAGATTTTC TAGAAGCAAA TAGTGCCACC ATCCGTCATG AGGNTCTGTT TCTATAACGC TTGINTGTCT TTNAGACTAC  
GTAGGTGGTA GCTTATGAGT AGTAATGTNC TTTTGTAGT AAATGTCACC AAATAAGCAA ATAAGAGAAA CATGAAGGCC  
AAAAACTGTN TTACTATTCA GGAGAAAATG GACGGTTTAG CAACAATACA ATGTAGACTT CAAAATATGA AAAATCAAGG  
AAATTNCTGT CATGTGCTTT AAGGGCCTCC AGAGAAGTAT TAATTTGTCC TTTATGTGAA TTTAATGAGA TCATGTGAAA  
TGTATG

SEQ ID NO:1421: (Length of Sequence = 294 Nucleotides)

ACCCAGTACA GGTACTCTCA CAGGAGGCAC TCAGCAGGGA TGTAGTGACA GCAGGTAAGA NTCCACCTCT NTCCCTGCCT  
GCNCTGGGA TCCAGTATTG GCCCATGTAT CINCCTCAT TCCTCAGGCT TCCIGGACTT TINTTGGAGG GAAAGAGGAA  
CAGAAAGAGG AGCAGGCAGG AGAAGCAAGA GCTCCCGGG GCTATGAAAG GTAACATACC TGGAGAGTTT NGGGAGACGG  
CGGCTTGINA GAGACAAGGG GAAGAGACAG AAACAGGAGT ATTCTAAGAA GCAT

SEQ ID NO:1422: (Length of Sequence = 306 Nucleotides)

GAAGGGCATA TTTAATAGCT GCTGCAAACA TATGGAATAG TGCTTTAATC AGTGGTGAAC AAGAAATTC CTGTGTGTG  
TTATAAAAAC AAGGGACATT AATGINCTTG TTCTGTACC ATAGTAATGT GNAAAAAAA ATAGTGGTGT NAATGGTGT  
TAATTTGTAC AGTTGTGTG AAAGTAGAAT GGNACAGATA TTTTGGTGA TAGGCTTTTG TCTTAGTTAT AAAAATTAGG  
NCATTTGGTA TGATAAAGGC NGAGAATCTT AACAAATGGG CACTGGCCCA GAAAATTNCA GGGTGC

SEQ ID NO:1423: (Length of Sequence = 274 Nucleotides)

TGTGTGTGTG TGTGTGTGTG TGTGTGAGAA ATGGGGAAAG ACTGGTCTAG ATAATATTTT AGGTACCTTC CAACACTAAA  
ATGGTATGAT TCCAGCTTA CAAAAAGCAA ACTATTTTAA TATTCACCAC TCAATATAGT GTATCAAGCT CTCGGTTTAT  
GTTTAAGGGC TTAGGNCACA GCAGCAACTA TTGTGGGCA ATTAATNCAA AAACATCATG TACCAAAAAG GCATGTTTAG  
GNCCTGCAGG ATAGTGAAAA AGCAAGAACA GTCT

SEQ ID NO:1424: (Length of Sequence = 297 Nucleotides)

GGAGGATTAC TTGAGCCAG AAAAAAAAAA AAGCCTCAGG GGTTCGGTG AATGTTGTGT GGACTTCGT GAGAACAGAC  
GTTTGATGTG AACTGANITC AAGGCTGATA CAGCCAGAA CCAGNACAA GGTGAGAAAC TGCTCGTTTC CGGGAGGCAG  
GACTTCCTAA CCGGAGGCA CTGCAGTNC CTTCTGAAA CAGGTTTGA GGATAGGGAA ATTCTGNC GCGCGGGGG  
ATCCACTTAG TTTCTTAGNA GCGCCGCCA CCGCGGTGA AGGCTCCAGC TTTTGT

SEQ ID NO:1425: (Length of Sequence = 276 Nucleotides)

ATTTTTTCAA GGATGAAAG GTCAGAGAAA AATAAAATA AACATCTTTC AATAGTCTTT CCTGGTAAAA GCAGGTCTC  
TNTGGGCTGG GGAGTAAAGG GTGTGGGCA AGGGAGTGG GGAGAGGCTG TAAACCTTCC CCCAAACCC AGTTTTAGAT  
CCTTTGGTTT CCTTCTCCCA GAAGATGNC AGAAGGCAT NGTGGGNAAC AGCAGGGNGG AAAATATGGT GATGACAAAC  
CCCAGATGAT CAAGGGGCTG ATGCTCTG GCGCCA

SEQ ID NO:1426: (Length of Sequence = 295 Nucleotides)

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TAGTGGCATA TGGACCGGAA AGGGTTAATT TAAAGGGGGG GAACCTCAAA AGTTTTTTTA AAAAAGAAAC TTGTCTGCCA  
CAGTATGTTA CCAGTGTTAA CCCTTCGCCC AGTTAGCAAA CTTTGGCCTT AAGCCTTTTT CCTCTAGGAT ACTCCCCATG  
TTTCGGTAAT CTTGGGCATA CATTMTTAA GNATGGACCT CTTTGCCTTG TTTTGTMTTC ATGCTGCTGT ATGTCCAAGT  
ATTGTTAATT TCATAATAAG ACAAGAGTTG CTTTCTTTTT TAATTCCTTT TTCCC

SEQ ID NO:1427: (Length of Sequence = 207 Nucleotides)

TCAGGAATGA TAGTATCTGG GATGAACCTC TCTTAATAA GATTTCAGGCC AGINTTGGTG GGTGINTGCG GATGATTGTT  
ACTGGNGCAG CCCCAGCATC ACCAACAGTT CTGGGAATTT CTCGGGGCAG CTCTAGGGTG CCAGGTTTAT GAAAGGTTAT  
GGCCAACTG AGTGCCACAG CTGGATGTAA CTTNCACCA CTCCTGG

SEQ ID NO:1428: (Length of Sequence = 223 Nucleotides)

TAACTTCTC TCCAACCTCC CCAGGTCCCA TCAGTGTTGA GAAGGAATCT AGGCCAGCTC CTGGGAGATG CCAGTTAAGC  
CGCTTTGAAT CCTGTGCCCT TCCAATGNC CTTATAGCA GTCGATGTCA GGGATTGGGA CAACTTTCAA AACAAGTCCA  
TCAAAGTCCC CATGGGCACT AGGGGCTCTG GGAACCCAGT GTCGAGAGGC TTAGAGNCAT TGC

SEQ ID NO:1429: (Length of Sequence = 222 Nucleotides)

AAAACCAAGG AGCAAAGGGG AGACAGAGAG AAAAGTGGGA TGGATTCAAA GACATTGCAA CATAGAACTN ACCGAACTGG  
CTGTINTGAG GTAAGGGNGG CAGGATGACT CACAGGTTTC TGGGATTATG TGCAACAGGT GGAAGGTGAT GCCATTAGCC  
AGAATAAGGC TGTAGGCTNA AGGGGAGTNA AACTGTTCT GGGGTATAA CATTGATAGG CC

SEQ ID NO:1430: (Length of Sequence = 246 Nucleotides)

CAAAATTTCC TGTATCCTTT CATGGGTTIN CTTTGTGTTG TTTTGGTAAG AACATTTAAC ATGAGATGTA TCTTINAGTT  
GTGTGTGTTG TTGANCTTTT TTAGATACAT AGTCTCACTC TGTTACCCAG GACTGGAGTG CCAGTGGACA TGATCCACAG  
CTCACTGACA GGCTCAAC TCCTGGGACC CAAATGAATC CCTCCACCT NCAGCCCTCC CAAGTAGGCT AGGGACTACA  
GATGTG

SEQ ID NO:1431: (Length of Sequence = 364 Nucleotides)

CTINCCACTC GATGATGCTT CTATAATTTT GCCCTTTAAC AGAACTTTC AAAAGGGAAG AGTTTTTGTG AATGGGGGAG  
AGGGTGAAGG AGGTCAGGCC CCACTCCTTC CTGCAATGTT TACAGTCATT GGAATAAGG CATGGCTCAA ATCGGCCACA  
GGGNCGGTGA CCTGTGCCC CAGGGTTTTG CCCCCAAGTG CCTCCATTTA AAAGCATTAA GGCCGGTACG GCATCTTCAA  
AACAGAGGGC TGGCATTGGA GGAAACCTT GCTGCTTTAG TCCCGATAGG GTATTTGAAC CCCGNTATA TTTTAAGGCA  
TTTTAAATTC TCTTCCCCC ATTTIATTGA CTTTGAACAA TTAA

SEQ ID NO:1432: (Length of Sequence = 208 Nucleotides)

GTGAGTNAAC ATGGATGGAA ACAAATTATT AGGTTGTCNA AAGTGAAAA CACCAAAAT AAGATTTAAA AAGAATGTCA  
GGTATCCATA GAAAAATATT AATAGGTCTA ATACATATGT AAAANTTGGC GTCCAGGGG GNAGAGACTG NAAAGTTATA  
TTTTNNATGG CTGAAATCCC CCAANTTTA ACATAAGCA CAACATTT

SEQ ID NO:1433: (Length of Sequence = 274 Nucleotides)

GGAAGGTTTT TAATGCATGA AGTATACTTG TGATCCTGGA GGTGGAATA GATTCAGTAA AGATAAAGTT TGGCAAAAAT  
GATTCINTCC CTAGGATTTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT



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CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC NATGACTTTG GACTTGGCCA  
TGCAACTTGC TTTGGCCAAT ACAATGTGAG TTAA

SEQ ID NO:1434: (Length of Sequence = 249 Nucleotides)

GCTCCATAGG TCTAAGTTTG ANCTTTTCTA GAAAAGGATT TGCAGGACGA TCTGACGAAT CTGGGGCTTC CAAATTAGTT  
CCACAGTTC TAGTATTTTT TTTTTTTTTT TTTTGACAGA AGCAAATAAG TAAGTTTAC TTTGTGATTA AAACAAAGT  
GAAATGCATT TAGTCCCAGG AAATGNCAAT CCTTCTGCA TCTNACTTTT TTTTGCTGTG ACCTCGAGNT TCTCTGTCC  
TCTTCAGTT

SEQ ID NO:1435: (Length of Sequence = 201 Nucleotides)

GAATGGGGCC AATGGCACTC ACTGINTCTT CAGGCCCCCA CGGACGGCAT GCCTGGGGAA GCCTAGTCTA CTTACCATCA  
GCACGTTGAT CINTCACACA GCATGGAGCC ATAGTTTACA AAGGACCACG GCAGGTCAAG GACAGGCCAC TAAAACITTT  
GGTGCTGGGC ACATNACCCA CCTCACCAN CATCAAAGAC A

SEQ ID NO:1436: (Length of Sequence = 312 Nucleotides)

GGGAAAGGTA TATTAACCTT CTGCATCAAA GATGTAACAG TCATGGGGTC TTGGTGGCCA TCTGGTCTGA GTTAGGTACA  
GGACAAGAAA GAGTCAATTA ATCTATAATA AAGATCAATG ATTGAAAGAA GGGAGATCTG GTCTCTGTCT CTCCTAGTCA  
TTTACAGAAC AAGAGCAATG AGGAAGACCG TTATGCTATA ATCTAAGNAA CAGAATTGGA AATATGCTAC TGACTCAGTC  
TCCAGGGGCT TAACTTCCCC CTGGGCATAA TAAATTTAAG GAGTCTTAAA ATTTTATTTT CCCTTACATT GG

SEQ ID NO:1437: (Length of Sequence = 294 Nucleotides)

ATTCCAATGG TAATACTAAC GAATTGTGCT ATCTAAATAT TGGATAGTAA AAACGTCAAC ATTTAGAAAA TGTATATCAC  
ACAGGGAACC AATATTTTNC AAATTATCCA CATCTAATAT TAGGCAACCA CGCGCAANAA AAGACACGTT CAAAGTACAG  
GAGAAATGGA TGGATTTTAA TGTGAGATAG TACAAGANGT TTATTGATAT AGTTTCAAGA TTCCATATTG TAATAAACCT  
TTAANGAAAC TTTCACTTCT TGAGTTTTGG GTATAGGAAT CCAAAAAAAA AAAA

SEQ ID NO:1438: (Length of Sequence = 311 Nucleotides)

GGCCCTTTGA CTTTGTAAT GAGCACAATG AAATGCCGCC TACTGATGCT TCTNATGATC AGAACTCTTT TTTAATAAAA  
TAAATAACAT AAATCGTTGA ACATAATGTT CCNGTTGAAT GCAAANCAAA AAAAATATGG NAAACATTTT GNTAAAAITT  
TTTCCNGNTA AAACCATGAA CANTGGCTAT GATGAAGGTT ATTACATATG GAAAAAAAC TCACACAAGC ATATTTGNAT  
TTGGCTTGAA GGAACCCAT CATTAAATGC AANGCTAGGG ATTCITTTNG AAGCAGTTGA TCCTCAGGTT T

SEQ ID NO:1439: (Length of Sequence = 265 Nucleotides)

CGTGACACAG TTGAAGGAGT CGCTTAAAGA AGTCCAGCTG GAGAGAGATC AATATGCTGA ACAAATAAAA GGAGAGAGGG  
CCCATGGCA GCAGAGGATG AGGAAAATNT CGCAGGAGGT TTGCACATG AAGGAGGAGA AGAAGCATGA TACGCATCGG  
GTAGAGGAGC TNGAGAGGAG CTNTCCAGA CTCAAAAACC AGATGGCTNA GCCACTGCCC CGGATGCCC CAGCAGINTC  
CTCTGAGGTG GAGCTNCAAG ACCTT

SEQ ID NO:1440: (Length of Sequence = 241 Nucleotides)

GTTTTACTCT TGTGAAGATA GCACTTTAAT CCTAAATGAG CATGTAACGT GTGACAGATC CTATATCAGT TTTAATAATT  
GAAGCAGATA GTAATACTA GATTATTGAC ATTTTTNGT CATGTGTCA GCTATGCTT CAAACTTGCT CAAATTATAC

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TTGGAATTTT ATAGTGTITT ATTTATTATA TACTCTNCTT GTAATAANNT GGTAATCTAG TTTCCAGAAT CATGCAAATA  
G

SEQ ID NO:1441: (Length of Sequence = 247 Nucleotides)

GACCCOGATA TTCCGGCATC ACATAGATAT CCTCCAGATA AANGGTGGGT CCCTTCCATG TACTGTAGAT GAAATAGTAT  
ATCCCATAGC CCACCACGCA GGGCCCCAGT AGCTTCCCGG GCGCTGGAAG AATCTCTGCT ACCAAACAGT GATAGAAAGG  
ATTGTTTCCA AAGCCATCTG CTCTCAGGGC TTCTTCACTG ATAGNGTTT TTTTCAAGNA ATAATCCATG CTAAGAATGG  
GGTATTT

SEQ ID NO:1442: (Length of Sequence = 233 Nucleotides)

GATTACAGCC AAGTTCATGA ATACAAATAA AATAGCAATT TCCCTCATTC TCTCTTTTGT TTTCTGNTCA GAGAAATCAG  
GAGATGGGAG CATTATGCTC AGAAACCGAA GAGCTCTTCC AAGAGCTCCA GCTTAGAGTC CAGGCTTCCA GAGCATGCAG  
CCTCCTAACA CGTATGTGGT CACATGTGCA AAGACCTNTA TTACAAAATA TTCAGAGCAG NATTTCTNTT AGG

SEQ ID NO:1443: (Length of Sequence = 288 Nucleotides)

AATAACAAT GTGCAAGTIT TTATAACTGA TCGGAAGAAG GTTGACCCNC AGTTATCACC TTTAAAAAAT GGCTTAGIT  
AGGCTTTCTC CTTTTGTCCT TTTCCAGAAG AAACCTGGAG TCTGTCAAAT TTCACAAAAT ACCCTGTTGA GATTTTCCTT  
GGCTTTGATA AGGGTGAATT CACAGATTAA TTCGAAAAG AATTTACGGC TTTCTAATCA AATTGTTCTT TCCAGGGGNT  
TTTGIGNITA TTTAGNCCT TCTAAAGGTT AACCTAACT TTGATTAT

SEQ ID NO:1444: (Length of Sequence = 208 Nucleotides)

GGAAGTGAAT CACAGGGCCA AAGCCCCCTT TNCCTCAGT GAAGCAACTC AGTAAGATGG CGGTGCAGTG AAGCCTATTC  
CCACACACCT CGGCACTGAT GGAGCAGTCT CCAAAGGAAG GCTGAAAGGA CAGCAGGTGG TTGCCTTNGG GTCCTTCCTT  
CCCATANCIT TAGAGTGCCA TTTTTCAGCA ATGGGTAATA GCATCAAC

SEQ ID NO:1445: (Length of Sequence = 239 Nucleotides)

CCCCGGTCTC TNGGACACCA TTTTCTGCCG CTGGACGCAA GGGTTTGTGT TTAGAGAATC AGAGGGATCT GCATTAGAAC  
AGTTTGAAGG TGGCCCCGTG NCTGTTATG CACCTGNTCA GGCATTTCTT TTGAAGAAGC TCCTGTTTTT TCCGGAGAAG  
TCTTCTTNGC GGGATTTTTT AGAGGANGAG CAGAAGGNAC TCCTTTGTCA TACCTTGTGT GATATTTTAG AAAGTGCTT

SEQ ID NO:1446: (Length of Sequence = 243 Nucleotides)

TGCAGGGAAT TTNTGATGC AAAACCAGGA AACAAITAT CTCCACTGGG AATACTTTGA AGAAGGGATT AGAGCGGGGC  
TAGGGCAGGG AGGATCINTA AAAACAATA TTTGCCAAAC TAAAAACACA TAGGCACACA TGGGNATTAT TTTACTTTCA  
ACAAGTTCTG AAAGTAGTAA CAAAACCAGG GAGAGTTAAA AGAATAATTT AACACTNATG NTTCAGGAAT GCTAAAGGAG  
ACC

SEQ ID NO:1447: (Length of Sequence = 371 Nucleotides)

AGTTATAAAT GAACATCTGT TGCCTACTTA ATAGGTCAAT GAGTAGCTGT GACCCATTCT TAATTTGTAT GTAAGCATAT  
TTTTTACATA TTGTATCTA CTTCATTTTC CCTTGAAGCT TGCCAAATTG GTACACTTCA GTTTGAAGTG ATGTCTCTTA  
TATGCTGTAC CACCTTCTTA AAAATTGAAT TATCTTTCTT TCCACCTAGA TTGTTCTCAA AGCATTTGTT TTTGCTGGAC  
TTTCCACTCT TGACCATAAG ATGGTAGCAT TCCCTAAGGA TATTGCAGCA CAGTCTAATT CCACTGGTTG TCATCTACAG  
TTAAATCGCA AATAAAAAAT AATAATAAGC AGCAACTGAT TGCTCAAGTT G

SEQ ID NO:1448: (Length of Sequence = 366 Nucleotides)

AATTTTGTGT CCTGTAGGAA ATGCTTCCTT GGGTGTTTGT ATTATAGCCC AATCCAAGTC ATCCCTGAGA ACATCCCCAG  
 GTTGTAAAGGA TTAGTCAGAA GTCATGATGA CTGTCCTATA TAAATATTTG GCCTATTAAAC TAAAATTAGT ACCTTNCAT  
 TTCTCCNCTT TCTTGGGCGG GGCAGCGGGG GAGTGCAGGG GAGGGGAAAT AGGGAACGTN CAATTGTINTT TTAAGTAATG  
 CTCATAAAAT TCTTAGNCAA AGATGATCTT GCCCTCCACC TTGGTGACCC ACCGCATACG GGGTACATCT ATCTGGCCTG  
 TCTCIAGGCC TAGACAGAAG GAACAGGGAG GGTATTGTIT AACTTT

SEQ ID NO:1449: (Length of Sequence = 234 Nucleotides)

GTTGTGGGAG GGACCCGGTG GGAGGTAACT GAATCATAGG AGCAGTTTCC CCCATGCAGC TGTCGNGATA GTNAGTTTCT  
 CATGAGATCT GCTGGTTTAA TAAGCTTCTA GTGTTTCCCC TGCTGGCACT CATTCTCTCT CCTGCCACCC TGTGAAGAGG  
 TGCCTTCTGC CATGATTGTA AGTTTCTGA GGCTTINCCA GCCATGCAAA ACTGTGAGTC AATTAAACCT CTTT

SEQ ID NO:1450: (Length of Sequence = 220 Nucleotides)

GCTTTTINCTC TCCCTGTTTT GTTTGTAAAC CTAAGGAAGC AGAGCCTCTG AGACCACACA CAGCAGCGTC GCCCGTCCCC  
 AGAGGCACCC CGGCCAGGAC GGCAGGAGA GGAGACCCCC GTTCTGTCAT GCNCTGTGCG CCCGCCACGG TGNTCTCCCG  
 AGGGTGAGGC AGGAGGGTGG GTGGAGGCGC CACTGNTCCT CAGCTGGAAG GGCGGGGCAT

SEQ ID NO:1451: (Length of Sequence = 403 Nucleotides)

CCGCTGTTCa CCTACGGCCT GATTAAACTT GCCTTCCTGT CCTCCAAGAC CAGATGATGA TTATTCTCCA CCGTCTAAGA  
 GACCAAAGGC CAATGAGCTA CCGCAGCCAC CAGTCCCGGA ACCCGCCAAT GCTGGGAAGC GGAAAGTGAG GGAGTTCAAC  
 TTCGAGAAAT GGAATGCTCG CATCACTGAT CTACGTAAAC AAGTTGAAGA ATTGTTTGAA AGGAAATATG CTCAGCCAT  
 AAAAGCCAAA GGTCCCGTGA CGATCCCGTA CCCTCTTTTC TAGTCTCATG TTGAAGATCT TTATGTAGAA GGACTTCCTG  
 AAGGAATTCC TTTTAGAAGG CCATCTACTT ACGGAATTCC TCGNCTGGAG AGGATATTAC TTGCAAAGGG AAAGGATTGC  
 TTT

SEQ ID NO:1452: (Length of Sequence = 353 Nucleotides)

TGCCTAGAGA GGGGCGGGGA TTTAGAGAGC TGTTCTTCIG CCTATCTGAT CGCTCCTCA GACACTGATC TATTAGTCTA  
 GTGCTGCAAT TACTTGGATT GTAATGTTTC CTGCAATTT TTGCTTTTCA AATTCTTTTC ACCCTAAACT GTAAATACGC  
 CAGGAGTAGG TAAAACTTA CAGGTAAACA TTGCCAAGAN ATAAGGATTT TNATGTCTTC TGCTCAGTGG CATAACTCAA  
 ATCACATGAG ATAGATTCTT TTGCATCTGT CCATTGTATT TCTCTGAGGC TAATTTACAG CACTTTGTCA CGTTAGGNAT  
 TTTTTFCCC CAGTGTCTCT ACTCTCAAC TGG

SEQ ID NO:1453: (Length of Sequence = 258 Nucleotides)

GTTGCCCTN CTGTCTTCT GTNACCCAGA GAAAGCTTCA CAAGCATGCC TGAATTNAG TTGCACCATT TTATTACAGC  
 TGAAAGANIT GANTGTAAAG AAGGAAGTTT AATAGANCA ATAATNCAGC AGATTATTG ATGGGGAGGT ATCTATTGTA  
 GTTTGGCCAG TGAAGGCAGG TCATAGAGGA AAATTTAGGT AAGTCGGATT TNCCTTAAAA AGAGGCCCAA GAGTTAGTAC  
 CTCAGGATTT TGTTTCT

SEQ ID NO:1454: (Length of Sequence = 328 Nucleotides)

GAGATGGAGT CTGTCTCTGT CGCCAGGCT GGGGTGCAGT GGCGCGATCT CTGCTCACTG CAAGCCCCGC CTCCAGGTT  
 CAGCCATTC TCCTGCCTCA GCCTCCGAG TAGCTGGGAC TACAGGCGCC TGGCACCACG NCCAGCTAAT TTTTGTATT

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TTTGGTGGAG ACGGGGTTTC ACCGIGTTAG CCAGGATGGT CTOGATCTCC CGACCTCATG ACCTGCCCCG CTCGGNCTCC  
CAAATTGCTG GGATTACAGG CGTNACAACC GCGCCCGGCC GGTAGCAATA GTTTTAATTA AGGTCTTAAA ATCATACAAA  
AAGGAATT

SEQ ID NO:1455: (Length of Sequence = 342 Nucleotides)

AATTTAGGTA GATTAGCAAT CCCATGTAAC TTACCAGAAT CAGAATGAGA ATTCAGAAGT CACCTGANIT GGCCGGGCAT  
GGTGGCTCAC ACCTGTAATC CCAGCACCTT GGGAGGCCAA GGCAGGCAGA TCATCTGAGG TCAGGAGTTC GAGACCAGCC  
TGGCCAACAT AGTGAAATCC CGCCCCTACT AAAAATACAA AAAATTAGCC AGGCACCCTG TCCACAGCCC CCACACAGAC  
TOGAGGGGCC CCCATCTCCT GTTCTGAACC CAACAGGGTG GTCCCACTNT GGGACCACAA ACCAGGTATG ACTGTTTNAG  
AAGCAGGCTC ACTACCAGGN TA

SEQ ID NO:1456: (Length of Sequence = 296 Nucleotides)

ATCTTTGACC TATTAGGTGA ACAAATGAAC CTCACAGGAC ACACAGTATT TTTTAAAGGC AGACTCGCTC TCTTTTTTGC  
CAGTNAGCAG TTCTAGCTAA CCAAGTTACA CACTGTGGGT ATTCTGCCT GCCTCTTGAA TACAAAGGCC TAGTTCAGT  
GTGCTTTTT TNATTTCAA TCAATTTTT CTCTTTCTT TTTTGAGATA AACTIATTAA AAGTACTACT ATATATATAA  
AANCTCAAAT CAACTTTTCG GCCTCTCCT CGTGTAACAG GGAGTATATT CTGACG

SEQ ID NO:1457: (Length of Sequence = 314 Nucleotides)

GAGGATTCAT AAGTAGAATT TATAAGAAC TCCAAAGAAT CAATAACAAA AAGACTGGCT ATGGCCTTCG NAGAGCAGCT  
GCTGTCTGG AAATCAGAGG ACAGTGAAGG GAAGTCCGAA GATGAGCCTG ACACCATTCC GACATCCGTC CTCCTGCAGG  
TGGTGGAGCT GCTAGGAAAC TTCTTNTGGA CCACGGACAT GGCAGCCTGC NTGAAGGAGC TTGTTTTCCA TCTCCTGGCA  
GAGCTCCTAC GCACGGTGCA CACCCTGGAG CAGAGGCGGC ACCCCGCTGG CCTGTNCTCC TCANTCGCCC TCCA

SEQ ID NO:1458: (Length of Sequence = 254 Nucleotides)

GTTCCAGTCA CAGATGTTTC ATTATCACTA TTCAATATTA TTAAGCATCT AATAAGTATA AGGATGCATG AGTCAAGGGT  
CCCTACCTTC AGGTCCGAAG CAGGAAAGAG ACCAGATCCT AGAACAATAG GACATGGTAC CCGCTGCCTA GACCGAATTT  
AGAATCCGGC TGGGGTGAAG AGATTAATGA GCGAGTCATG CCATCAATGT GCTGTAACTG AGGTCTTAAA AACCACCCAG  
CCGCGACACA AACT

SEQ ID NO:1459: (Length of Sequence = 343 Nucleotides)

AGAAAGGCTC AGGGATTAAG TAAAAAGGCT AGTACATCTG GGCTCCATTC CATTATTTAG TCATCCAAA GAAGTGAAGT  
GGAGGATAGT GAGCATCTAG TATATGCCAG GCACTAGACT GGCTGCAGAG GATTCAGAGA TACAAAAAAC ACCTTGTGA  
CCAATTTAAT TTGAATTTAC CAAGTTGAAT GGCAAAAATA TCTTAAAAAT TTAGATGCCT TGATAAATGT AGTGGTATAT  
TATGATAGCC ATTCTATGCC TTGAGATACC GTGTATTCTA TATTGTATAG TTGAGGGATT GAGGCCAGTT GGGAGGAATA  
AATTATAGCT TGTGCTTATC AGG

SEQ ID NO:1460: (Length of Sequence = 348 Nucleotides)

ATTGTCAACA GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAAG GACAATTTAC AAAC TAAGAA  
TAGTAACATA GCTTTTCAGCA TCCTGTGCCT GANCATCACA CATCTACAAG TCTTTCAAGT CTTAATGCAA CAGGAATGIN  
TCTGGAGACC NGCAAGAACA TCAATAGAGA GCACTGATCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCNCAC  
AACGNATTGT TAGGGAGGAT TTGGGAGAAG CAGCCCCTTT GCTTAATACA TTNGGACCCC TTCCCTTAA GTTGAGGTTT  
AACCCTTGAA TGCAATAACT TGGCATAA

343

SEQ ID NO:1461: (Length of Sequence = 343 Nucleotides)

TGGGAAGATC AGGTCCTACT TGTTTTCTG TCCCCTCCAG CGCTAGATCA ACACAGTGTT AAATTAGTTG AATTTTCAGTG  
 GAGGAGATAA GACAGAAATG AAATCTGTGA AGATTTCAGAC TTTCCCAAGT TAAAACCAAGT CITGAGTTAC AGATCAAGAT  
 GATGCCAGAA ATAACATCAC ACTGAAACAT CAGTCAAATG TAGTCATCAT GGCAAAGGCC AAATGTCCCT TTCTTTTTTT  
 GCCTCCGCCT GCCTGGGAAT TTAGCATCCC CTAAAGCCAC TCATCTGGGA CAGGATTTTA GGGTGTGTAC ATGTTTTTCA  
 ATCTCCACAG GACCCAGCTG TGT

SEQ ID NO:1462: (Length of Sequence = 335 Nucleotides)

GGCATGGAGC AGGCAATGAC TTGTTTCATAG TCGCTGCAGT TATGAGCACC AGCTTGAAGT TAGGAACTCT TATAAATTTT  
 TGTTTTCAAC CAAGTATTGA GTGTCTGCTA TGTGTCAGAC ACTGCGCTAG GTGCTGAAAT CTCACTTCTA CTGAGGAAGA  
 CAGGAACATA AATGGTGATG ATCATTGCAT TAGAAGTGAT GCCACGGGAA TAGTGTGGGG CCTCTCCAGG GGGATCTNAA  
 GGTAGGGAGA CCACACTTCT CCAGTGGTGG AGAGGGCAGA CAGCGTGTAT NGGGTCTCTA AGGTCTNATT GCAAAGGTCA  
 TGTTTTAGCT GTTCA

SEQ ID NO:1463: (Length of Sequence = 382 Nucleotides)

GGACCGCTTT CGGTTCTCTA GGATAACAC GAGCATGCCC ACCACGGTGA AGGCGGAGGT GACAAACACC AGCAGCAGTC  
 CCGGGACCAA CACCGAGATG GACACCCTGC TGGTGTCTAG GTAGGAGTTG GAGTGCCTCC CGGTCTCCGC CAACCCAGTG  
 CTGTTTTTAC TGTGCGAAGT TAACGTGGGC GAGATCCTAG CGTACAGCTG AGGGCAGATC TCGTCATTGG AGAGGAGCAT  
 GAAATCCTTT CTAAAGAAGT TCACCGGCGT CTCACACTTN AGGTGCGTCA TCAGCACTTC GGAACCCAAG CNTTCTGNCC  
 ACTTGCTTGA AAGGCACAAT TGINCAGGAG CACINCCAGG GGTTCCTGAG GAGGGTCTAT CT

SEQ ID NO:1464: (Length of Sequence = 187 Nucleotides)

AANGACCTCA TTTCAAAGAA GAGCCGTCTC CTGACAAGGG ACGTTTCCCA GAGAGGAGAC GTGTTAGTGC AACAAAGACC  
 AGGCCCTGGN AGCCACGAAA GCCCTCCAGA TGCCTTGAGG ACGCCGTCTN TAGCCGNGTG GGCCACGNCC GGGTGGGGAC  
 AGACAATGAC AAGAGGCAAG ACAGCCG

SEQ ID NO:1465: (Length of Sequence = 276 Nucleotides)

TTTACACAAT CAGTATAATA CTGATAGGAA AACTTGACTG AGTTCAGAAA ANGAAAACGA AGTAGAGATC TCCTTTGCAT  
 CAGAACAAA TGTCATCTA TTAGCAGATA ATATTCACTA GTATTTTTTG AAAATACAAT ACCACANGAA AGAAACAGTG  
 GACATTTGGA GGGCTTTGAG GCCTGTGGTG GAAAAGGAAT TATCTNCCCG TAAAANCTAG ATAGAAGCAT TCTCAGANAC  
 TTGTTTGINA TGTGTGCCCT CTACTGACAG AGTTGA

SEQ ID NO:1466: (Length of Sequence = 375 Nucleotides)

GGGGTTTAC CATGTNCCC AGGCTGGGCT CAAGTGATCC ACCCTCCTTG GCTTCTCAA GTGCTGGGAC TACAGGTGTG  
 AGCCACGTG CCGGCTGGT TTTTNTTTT TNAATGAACA TGTTGCAAAT CACGCAGAGC ACCTTNATT CTGCATTTC  
 TGGGTATATA CAACATTGT CATCTCTGCC TACATTTAAA AGGCTCTGGT GTTATTTTAA TATGCTTTT CAATTTAGTA  
 ATTAATTCTA ATTTTCTTT GAGCTGAGAT GTTATTCATT GTTCCTCTAG AGTTGCTTTT ATTTGTTCAT ATATGTTTCC  
 CTIAGCATGT TTTTCGTATC TCTTAGTTAT TAGATACCTG AACATTTGAC ATTGG

SEQ ID NO:1467: (Length of Sequence = 319 Nucleotides)

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TGATAAAAGG AAAACGTTTT GATTTATAGT ACCAAGTGCT TAAACACAAG GATAGTGTTA GATTTTCGAG TGACTTTCCT  
 TTTTGCATTT TTTGGCAGTA AAAGCCAAAC GTTGTATTG TCCTTTTCAG AGTTGTCCAG CCCTTTTTC CTTTGTCCAA  
 AATGATTCTA AATAGAATCT AATAAACCAA TGTAGCATT TTTTTTCTA AATGAAGCCC CAAAAAGAA AAGTGCCTTG  
 CATCATTTAA AAAAAATAAT TAAATCCTCA TGGCCTCTAA ATTAGGTATG TAGGGCACTG AAAAGTCTT AACATTTTT

SEQ ID NO:1468: (Length of Sequence = 352 Nucleotides)

TTTGGTTAAC ATTCCAAACA TGTATAACCA ATTAACATGG CCTAGGGTTT TCTTTTATT GGTATTCATC TCAGTAACTT  
 GAATCCACAG ATATAAGCAG TATATAACCA GAAAGTTACA AGTAAACACA AATTATACAT GCAAATTTCT GTTCACAAAG  
 GTCACATGTG CAGGTACATG ANTTAGAAGC GTGCATCTAG GATTATGGCC AAAGTGTCTT AAAAAAGCAG AAATGTAAAA  
 TTACATCTTG AAAATATGAA GAGATGGTCT ACACACTTCA AAAATCAAAT GTTGCTTATA CCAGAGATGT ATGTCAATCA  
 CGGNTTCAA GTGACAAGCA GTAAGGATCC TC

SEQ ID NO:1469: (Length of Sequence = 427 Nucleotides)

GAGATGGAGT CTTGCTCTGT NACCCAGGCT AGAGTGCAGT GCGAGATCT CGGCTTACTG CAACCTCCGC CTCCTGGGTT  
 CAAGTGATTC CCCTGCCTCA GCCTCCCAAG TAGCTGGGAT TACAGGCGCC TGNACCGCA CCCAGCTAAT TTTTGTATTT  
 TNAGTAGAGA CGGGGCTTTA TCATCTTGGC CAGGCTGGCC TCCAACCTCT GACCATGTGA TTCACCTGCC TCCACCTCCC  
 AAAGTGTCTG AATTACAGGT GTGAGTCACC ACACCGGCC GGATTCTGTT AGTTTTCTTT AATGCATATT GAGTTTCTTT  
 AGTTTTAACA CACTTAT CTTGGTGGGA CCCAACTAT TCACTATGTT TCTTGGGGGA NAGCTTNGAA TCTTGGGGTG  
 GNAGCCAATT TGTAAATAGC CAGGGTG

SEQ ID NO:1470: (Length of Sequence = 426 Nucleotides)

AGGAGTTTGA GACCATCTG GGCAACANAG GAAAACCCCG TCTCTACAAA AAGAAAATTT GGTTTTATA TTTATTGTGA  
 TTAAATTTTT TAGAAACATA GCTGGGCATG GTGGCACAG CCTGTAGTCC TAGCTACTCA GGGGGCTGAG GTGGGAGGAT  
 TGCTTGAGCC CAGGAAGTTG AGGCTGCATT AAGTGTGAT CACACCACTG TNCTGCAGCC TGGGTGACAG AGTGAGACCC  
 TGCGACTCCA GACAGGTGCA CACCACCACA CTCAGCTAAT TTTTGTAGA AATGAGGTCT CACTATGTTG CCCAGGTGG  
 TCTTGAATC CGGGGCTCAA GTGATCCACC TGTCTCAGCC TCTCAAAGTG CTGGGATTAC AGGCATGAGT CACAGTCCCT  
 GGGCCCAAT TCATAGTCTT AAACAT

SEQ ID NO:1471: (Length of Sequence = 372 Nucleotides)

AGAATATTAA AAAAGACCAG ACGCTTAAAG CAAGANTTGA AATACCTAGT TGTAAGATG TGGCACCTGT GGAGAAGACT  
 ATTAAGTTGC TTCCAGTAG CCATGTTGCA AGACTACAAA TATTCAGTGT AGAAGGACAA AAGGCAATTC AGATCAAACA  
 TCAGGATGAG GTTAATTGGA TAGCGGGTGA TATTATGCAT AANCTTATTT TTCAAATGTA TGATGAAGGA GAAAGAGAAA  
 TCAATATAAC ATCAGCTTTA GCAGAAAAAA TTAAAGTTAA TTGGACTCCT NAGGTTAACA AAGAACACTT GCTACAGGGT  
 CTGCTTCCTG ATGTGCAAGT ACCNACATCT GTAAAAGATA TNCCTATTT CC

SEQ ID NO:1472: (Length of Sequence = 332 Nucleotides)

GGTAGAGACA GGGTCTCACC CTGTTGCTCA GGCTGGTCTC AAATCCTGG GCTCAAGCNA TCCTTTCACC TTGGCCTTCC  
 AAGTNTAG AACTGGCCAG GGGTGGTGGC TCATGCCTGT AATCCAGCA CTTTNGGAGG CAGAGGCGGG CAGGGAGTTT  
 AAGACCAGCC TGGCCAACAC GTTGAACCCA CTCTCCACCA AAANTACAAA ATTTAGCTGG ATGTGGTGGT GGGCGCCTCT  
 AATCCAGCC ACTCAGGAGG CTGAGGCAGG AGANTCACTT GANCCCGGA GCGGAGGTT GCAATGAGCA GAGACGGCCT  
 GGACGACAGA GT

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SEQ ID NO:1473: (Length of Sequence = 434 Nucleotides)

GCCTTTAATT TGGTTTTNCT ATGCCAGTAC AGAAACATCT GGACAACACT CTTGAGCCTG CAGAGGCTCA CGGCCACACC  
 CACTTCTGCC GCAGGACTGT CTGTTGAGGA GCCGAACCGA TGAGGCACAG TAGCCAGGCC CTCCGAGGG CTCCAGAAGC  
 TCTAGGTTTA CGGGGTCACC TTCTGTAGG TGACGTGAAG ATGCTGAGTC ATTGGCTGTN TCGTGGTTGC CATGGAGACC  
 GTCTGCTCAA GTTTGCCCTC AGAATTCAGC CTGAACCTCC GGGTGATCTG CTCTACGTGG GGCTCCTTGG CGAAGGAGAT  
 CCTGGCGATG GAGTGGGATG CGATGCACAG NTCTTGCCCG TTCAACTGCG CCTCCTNCAC TTCCANCAC GGCTGTTTTT  
 TTGGCGTGAC AAAAGGCCAC CTTTTGGTG TCGG

SEQ ID NO:1474: (Length of Sequence = 402 Nucleotides)

GACGTTNAGG TGGGAGGTTT GTTTGAGCAA CATAGTGAGA CCCGCTCTCT ACACAAAAC AAAAAAATA AAAAATTATC  
 TGAGCATAGT GGAGCATGGC TATGTTCCAA GCTACGTGGG AGGCTGAGGT GGGAGGATTG CTGTCNTCCA GGAGTTCAAG  
 GCTGCAGTAA GCAGTAATGG TGCTACTTCG CTTCAGCCTG GCGACAGAG CAAGACCCTG TCTCGAAAAA ATAAATAAAG  
 TAAATAAAGT TGAGAATTTT GTATTTTGGT ACAGAAGTTC TATGCCCTTN AAATGCTCCA TTGAGACAG CTTAGGGCAG  
 GACGCTCTGA AACTGGGAAG CCTGGGGCCC TGTACANTCT TGGCTGTCCC CTGTACANTC TCCTAACTCT AGAGGGCTGG  
 TT

SEQ ID NO:1475: (Length of Sequence = 324 Nucleotides)

TTCATACCT GTGCTGTGTC AGACCAGGCA GAGTCATCTC ATTCCACTGG TCTAATGGAT GGCAATTGAA TTTAATTAAAC  
 AAAACTCCTT TGACTTAGTT TCATACTGTG CTGAATGTAA TGGAATCCTC TCTGCCCCC TTATCTCTCT CTCTTTCCT  
 CTCTCTCAAC TAAAAATGT CCTTAACATA CATCCACTTT AAGAATATTA AAGGCTATAC ATTATACTTA AAAGATACAA  
 TACAGTCATC CCCCTTCCA TGACTTAAAT TGTATAACAT AAAATAATTA AAAAGNTACT TTGGATAGTG ATACACAGTA  
 TAGG

SEQ ID NO:1476: (Length of Sequence = 244 Nucleotides)

GAAAAACCAG AAACTCAAAA TCAGAGTGCC TCTCCTCTC CAAAGGAACA CAGCTCCTCA CCAGCAACGG NACAAAGCTG  
 GACAGAGAAT GACTTTGACA AATTGAGAGA GGAAGGCTTC AGAAGATCAA ACTACTCTGA GCTAAAGGAG GAAGTTGGA  
 CCNATGGCAA AGAAGTTAAA AACTTTGAAA AAAAATNGA CGGATNGATA ACTAGNATAA CCGATGCAGA GAAGTCCTTA  
 AAGG

SEQ ID NO:1477: (Length of Sequence = 338 Nucleotides)

ACAACACATA CTTGAACTG ATTATGACTG TTTTGAATG CATTTGATT CCTTAGCTAT GCCTCTCAGG TGAAAGGACC  
 AATGGCAAGA GGAAGCAGAG GATTCATGCA CTAGAAAATA CTGAGAGAGA TCAGAGTATT CTGTCTACTT CACTGAAGAT  
 ATGGTCTATT GAGGGAAAAC TAATTAACAG TTGATCCAAG GAACAAAAGA ATGCTGTTAT GTGACATTTT GTTGGGAAAC  
 TGACTGTAAT AATAATAAAN CAAATGTCCA GAGGAATGTG TCACATAATT NCAGTGTTTA TGGTTGATAA TTCAAAGGCA  
 TAGATGAATT GGGATTCT

SEQ ID NO:1478: (Length of Sequence = 397 Nucleotides)

ACCCCTTCCC ATTCTGATAA TCTGGCCATG ACTAGCAGAA GCACAGCTAG GCCCAATGGG CAACCCAGG CCAGCAAAAT  
 TTGCCAGTTC AAATTGGTCC TGCTGGGAGA ATCTGCAGTG GGAAAGTCAA GCCTGGTATT ACGTTTGTG AAAGGGCAGT  
 TCCATGAGTA CCAGGAGAGC ACCATTGGAG CGGCCTTCCT CACCCAGTCC GTTTGINTAG ATGACACAAC AGTGAAGTTT  
 GAGATCTGGG ACACAGCTGG GCAGGAGCGA TATCACAGCT TAGCCCCAT GGTACTACAG GGGTGCCCAA GCTNCAATCG

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TGGGTTTACG ACATTACTAA TCAGGGAAAC CTTTGTCCCG AGCAAAGACA TGGGGTGAAG GGACTIONAGC GACAGGC

SEQ ID NO:1479: (Length of Sequence = 389 Nucleotides)

GCTAGAGNGC CGGCTTGGCG GGTGAGTGG CCGAGCTAA GGGTGGGAG ACCCAAGGGC GGCGACTACG ACGGCGTTGA  
TATCGTGGT AACGACGGCC TCAGCAGGCG GGAAGATGA AAGGCCGNT CGAGCTGGGA GATGTGACAC CACACAATAT  
TAANCAGTTG AAAAGATTGA NTCAGGTCAT CTTCCAGTC AGCTACAATG ACAAGTTCTA CAAGGATGTN CTGGAGGTTG  
GCGAGCTAGC AAAACTTGCC TATTTCATG ATATTNCTGT AGGTGCAGTA TGCTGTAGGG TGGATCATTG ACAGAATCAG  
AAGAGACTTT ACATCATGGA CACTAGGGAT GTNTGGGCAC CTTACCGAAG CTAGGAATAG GGACTIONAAAT

SEQ ID NO:1480: (Length of Sequence = 384 Nucleotides)

CTGAGAGCCA GGAGCTCTTG CGGAGAAGCC ACTGTCTGCA CGCCACCTGC TTCGATGACC CTGCTCTGCC ATCCCTGTGC  
TCCAAGGGCC GGGCCCTGCC GTTGCTGTG CCAGACGGGT CTCAGGGAGA TGCCGGCCAG CAGGTATGCA TGGCGAGGCC  
TGGGCATCAA GGCCCGGATT CTATGGCTGC CAGTTTCATT CTCTGTTGT TTGTCCCTT AGCAAGACTT ATGAGGTTCC  
TTGAGGACAA GACTCCCTCC TGCCACCTGG TCTGTTTCTT GAACATTAC TGCCTAGCA CGGCCCCGGG ACGCAGNCTT  
TGGGAATCAG GCCGTGGCC ATGGTAGAGC GGCTNGCACT GCTCGGCACC GTGACGGACG TTTG

SEQ ID NO:1481: (Length of Sequence = 257 Nucleotides)

ATGTCTAGAG CTATTCTGTT TTCCAAGCC ATTTGGCTAG TAGGCCCTAA TTGGTCAGTG GGTCTGACC CCCCAATCCC  
TACCTCAGCA GCAGGAAAGG GAAGTGCTGG TCTCCACTG TNCCCACTAA GGCCCCGTGG TATCTGGCA GAAGCCTCTG  
CATGTATCTN CGCTCTGAGG ATGGGGGTTT NAAAACAAA TAAGACCCTA CGTCTACTA CCTTGAGCTT GGCTTAAAA  
CCACGGGAAA GGAAGAG

SEQ ID NO:1482: (Length of Sequence = 345 Nucleotides)

AATTGAGCTC AGACTAAAGG AATTCTTTT TGACTIONATA GTGATTAGT TATGATATC CTGTGGCTT AAGAACAATG  
CCTATGATT AGTTGTGTTA TGTATATTT TACTTATAAC CAAACAATCG ATTGGGTACA AGTAGCCTTA GGGCAACTACT  
TCCTTAAAAA CATGTTTCTG ATAAACTAAA GCTTTAGCAT TAACCAGAAG TCATAATTTA ATAGTATTTT AAAAATACCT  
CATTTATTTT AAATCCTGTG TTGGGGTAGA GGATTACAGT TGTCAATTTA AATACATGAA TCTCTGTCA AAAGNGGTAC  
TTTGACAGTT TCATGGGAGG TCAGG

SEQ ID NO:1483: (Length of Sequence = 344 Nucleotides)

CTGATGTACT GTTTAATAT GCTGAGTACT GTTGATTCAA CAACAAACCT TAATGGGTGA TGAGCTTTTG CATACCAATA  
TGAATTTNTC AGCACTTCTG AAAACTGGCC ATCAATTTNC AAATTCACAA TTTGCTGGAT GTCAGGGAAC AATAGGAAGA  
AGAATGAGCG TCAATTTTCA TGTCTTCTT TGCTTCTTCA CTGGCCTTCC ATAGAAGTAG TCAGAAAAA ACAAGCACC  
ATCAACCACA CTTCAAAAC AATTCAATTT GGCCTAAGCT TTGCTCAACA TTCATATGAC AGAAGGTAGN ATAATGAAAA  
GGGACTGCTG GGCATCACTT TCCC

SEQ ID NO:1484: (Length of Sequence = 380 Nucleotides)

TTCTTAAAG CAGTCTTCC TACAACCTGT ATGCAGTAAG TCACTTAAGC ACTTAAGTGT CATATGGGTA CTTACATGGA  
ATTAGAGCAC TTCTGAATG GAATTAGAAA AAGGCAAATT GTGCATACTA CTGATGCATT CATTTCCTAC AGAGATATGA  
TACCAAGGGC CAATAAGTGA ATAGAAAAAG GGAGGAGGAT TTATTAATGG AATGAGTTCT AACCTGTCT CTTACCAGCC  
ATATGACTTT GGGNTAAATA ATCAAACGCC CAATGAGCTC AACTGTCTAT TATTAGGGGA ATTTAAATGA GAGAATGCAC  
ATTAATTATG CATTGCAGAG TACATGGGAA AATAGTAAAA GCTTAATATT TAATACGGTC



SEQ ID NO:1485: (Length of Sequence = 334 Nucleotides)

GAAGGAGCGG GGAACCAAGT TCTCACTCTC CTCCCACCTG CTATTGTCAG AAGAGCGAGA TTTCAGGGCA GCAGAGAGCA  
TCAGGAGATC AAAAGAAGAC ACTGCTGGGT GGTCCCTTAG CAAGTTTITAG CTCTTTTNC TGTCTGGGAGA GTATTCCCTG  
GGCACAGTGC CAAGTGTCTC TAAGAAACTA GTCATGCCCTG ANCTTAAGGG CTCGCGGATT CTGGGTGGTG GATTTCCCTA  
GGCTTGCTCG AGCCTGCCAG TGCTCTCCTC TGTCGCTCTG ATTTCCATTG ACGCTGAGCA GTCTGCACTN CCTTGGACAG  
ACCCACTGGC ATTT

SEQ ID NO:1486: (Length of Sequence = 164 Nucleotides)

CTGAAACGGA AAGATGGCGC TGCTGINTCT CTAAGCCTAG GCTTCTTGCA CTAAAGCACC AAGGGCATCG CACACAGGCT  
TGGCAGAGGG GCCATGGCCA GANTCACCAC CTTAGACAA GTATGTTGGA GGTCTCGAAT CCCTTGGCAC CCCCAGCAT  
GCAG

SEQ ID NO:1487: (Length of Sequence = 298 Nucleotides)

TTGAACCCAG GGGGCAGAGA TTGCAGTGAG CCGAGATCGT NCTGCTGTAC TCCAGCCTGG GCAACAGAGC GAGACTCCAT  
TTCAAAAACG AGAACCCAGA GGGCTCACTT GCCCCITCCA CCACACAGTG AGAAGGCACC ATCTATGAGC CAGGAAGCGG  
GCCCTCACCT AACAGGATCT NCTGGGCCTT GACCCAGGNC TTTACAACTT CTAGANCCAT GAAAAATTTT TGTGTCTCT  
AGCAGNCCAA ACAGAATTAG AACCATTAAAT TTCTATTTCT CTTTAGCTT AACACTGG

SEQ ID NO:1488: (Length of Sequence = 343 Nucleotides)

TTGCTAGTTC AGGNTCAATG TCATGGCTGT AACTAATATA GTACATTCCG CAGTTGCAAC GCGAAATGAT CCGCTGGACT  
TGCTGGGCTT GCTGTGCTCT ANCTGGCTGG TTCCAATCTG TGGTGTGGT AACCATGCG CCCACTGCCT GCCACTCTC  
CATCAGCTCC TGCACAGAGT CCAGACTACG CTGCCGGTGC TCGCTCTTTT GCCCAGGTTG AAGTGCAGTG GCGCAATCTC  
AGCTCACTGC AACCTCCGCC TNCGGGTTT AAGCAATTTT CCCCACCTCA GCCTTNCAG TAGCTGGGAT GACAGGGGGC  
CGCCACAACG GCCAACTAAT TTT

SEQ ID NO:1489: (Length of Sequence = 412 Nucleotides)

ATTACCTTTT TATAACCCAA GANTGCCATT ATTACACCCG GAACCCCTCAC CAAATAAGTA GGAAACTAC ACTGAGAACA  
ATTGGGCCC GCTGTCTCTG GCCCATTTCC CTTTCTACCG CCTCTGTGTC ATTCCAGCAA TCTAACTCGA TGAATGATCT  
TCCAGTTGGA AAGATGGGGA CTTACAATG TGCAGACCCA AAGATCTGTC TTCCAAAGGC CAATCACCAC TGTATCCTTC  
GTTCCCTTAA ATGTCGTTGT TTATTGAAT ATATTAAGGA ATAATATCAA GGGTAATTAT CTATGTATAA AATGTATGNT  
TAATTTTTTA GGGGACCATC ATACTGTTTT TCCACAGTGG CTGTACATTT TACAATTCCC ACCAACAATG CACAGGGTTC  
CATGGTTCCT AT

SEQ ID NO:1490: (Length of Sequence = 356 Nucleotides)

ATACCTTCTT TCATTTAAGC CACCCAGTCT ATGGTACTTC GTATGGCAG CCTTAGCAAA CTAATACGGA TTCTCATCA  
GGTTCAGATT TTNCTAAATA AAATGTGTTT GTGAGGGTGG TACAAGCAAC AGTGATATAT TTCTTTAAGT ATTTTCCCCC  
AGCCAAATTC CAACAAGACA ATAATGTCTA ATGCACTGTC TGGTGAATCG GAAAATCTCC TGAATGAAAT AAGAGCCTCT  
AATACCCAAA AGGGAATGAA GTGAGTCAAT ACCACAGCCT GTGAATGAAA ATAAGTCTC TGAGGAAAAC ACATGTAAAA  
AATGACACCA TGTGGATTAA ATGGGGGNAC ACAAGT

SEQ ID NO:1491: (Length of Sequence = 335 Nucleotides)

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TTCCTACCA AAACAGTTA CAACAGTTCC AGCCAAATA CACAGGCTAC CCCATATGCC ACGACACAGA TCTTGCAATC  
 CAACAGCATA CATGANTTGG CTGTCGGTCT GCCTGATCCN CAATGGAAAA GCTCAATTCA GCAAAAAACA GATCTGNTGG  
 GATTGGTTA TTCTCTACCT GATCAGAACA AAGGTAACAN TGCCTTACTT TACATTCTG ACTACCGNTT GGCTGAGGGA  
 TTGNTAATA GAATGCCACA NAACAGTCT NAGGATTTTA GCANCCACCA GCTCTNACAA CAGCTCAGGA AGGAGTTGGC  
 AGTNTCTCAG GTGGG

SEQ ID NO:1492: (Length of Sequence = 321 Nucleotides)

GACTTCATAA AACATCCTTT ACTATATTTT NAAAGAAAGC AGAAGTAACA GCAATATATG TAAAAGTAAT GNTTTAATGN  
 CTATAAGCAA GNCAGCAA TAGAATTGTG CTTCTTTTGC AGACTGGGN CAATGAAATG TTTAGCTACA ATTTNCCCAT  
 ACAAACATGA AACAATATTC ATATAGNNTA ANCACCTCA CAAATAACTG ATGGGTGATG ANCACACACC AAGTTCGACC  
 AAAGCAAAAA NTAACTGAA AATGTGTGGG TGGGGTTATT CATATTTTAA ATTCAACATG CTGCTCTAT TTAATAATAC  
 C

SEQ ID NO:1493: (Length of Sequence = 315 Nucleotides)

GACGGAGCGA GGGGACAGAG CCCAGGGATG GAGGCGGGAT GCGGGGAGCA GAGCCAGGG ATGGAGGCGG GATGCGGGGG  
 AGCAGCTGGT AATGTGCAGA GACTGGGAGA GGGCGGTGTC CAGGTGGAGA GTATTTCAAG GAAGAGAAGG ATTAACAGCG  
 TCCACTGCCG CAGATGGGCC AANCAGAGAT GGGACTGGAA ACCAACCCT GCAATTTAGCA TCTGGGGNC TGCTNATAAC  
 CTTGGTTTGA TGGCTCCTCA AGAAGAGCCA NAACCTTNA AAGTTAGTTC AAGAGAGAAG GGGNGAAGAG AACT

SEQ ID NO:1494: (Length of Sequence = 405 Nucleotides)

AAAAGTTGAC AAAACATAAA GTATCTCTAG ACAGCAAGGA AATAATTTCA CGAGATTGCT AAATTGATGT CAACACCTGC  
 AGTCTAAAAT TTATACAGTT CAATATGTGT CATTTGATCA CTGGCATGTC AAATATAGAA CAGCTATGAC TTTGCTGGCC  
 AGTAAATTAT CTAGCAGTGA AAATCACTTT TTAGGAGAGT CGCAATCAA CATTTGTTAA CGTGGGAGCC TATAAAGATG  
 CAAATTCCTG AACAACAGTG TCTAAGAAAA GTACATTGGG TCACTCTGAA CAGGTGGTAT GAACATTTGA TTTAACTGCA  
 AGATCINCNG CTNFTTACGG GCTTTGTAC CATCGNATGA ATCTTACATC CGCTGATGAC TNAGAGCAAG CAGGGGCGAG  
 CTGCC

SEQ ID NO:1495: (Length of Sequence = 364 Nucleotides)

CGTCTAATGA AGAGCTTCGA AACTGTCTT TGCTGGCCA TGTGGGATTT GACAGCTCC CTGACCAGCT GGTCAACAAG  
 TCTACTTCTC AAGGATTCIG TTTCAACATC CTTGTGTG TGAGACAGG CATTGGCAAA TCCAGTTAA TGGACATTT  
 GTTCAACACC AAATTTGAAA GTGACCCAGC TACTACAAT GAACCAGGTG TTCGGTTAAA AGCCAGAAGT TATGAGCTTC  
 AGGAAAGCAA TGTACGGCTG AAGTTAACCA TTGTGACAC CGTGGGATTT GGAGACCAGN TAAATAAAGA TGACAGCTAT  
 AAGCCGNTAG TAGNTATAT TGATGCCAG TCGAGGNT ACCT

SEQ ID NO:1496: (Length of Sequence = 370 Nucleotides)

GTCTCTTGA GCAAGGACCC AGTATTTCAT CTTAATTTCTC AGGGGAATCT CTGTAGAGAT GAAAAGCAGG AGAACCAAGG  
 CAGCCTGGTC TCCCTGGGTG ATGAAAAACA GACTAAGAGC AGGACTTGC CTCCAGCTGA GGAGCTTCCA GAAAAGGAGC  
 ATGGGAAGAT ATCGTGCCAC CTGAGAGAAG ACATTGCCCA GATTCTTACA TGTGCAGAAG CTGGTGAACA GGAGGGCAGG  
 CTACAAAGAA AGCAGAAAAA TNCCACAGGA GGGAGGCGC ACATCTNCCA TGAATNTGGA AAGAGTTTIN CTCAAAGCTC  
 AGGCCTTAGT AAACACAGGA GNATNCACAC TGGTGAGAAA CCTACGGAT

SEQ ID NO:1497: (Length of Sequence = 376 Nucleotides)

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CACACACATA CAAAATCTGT CCATTGCGG GAGNAATNTG TATGTATGTN AGTTGGAGGG TATTAAAAAT CAGTTTTATT  
 CCAAAGATTT AAAACTAGAC ATGACTTAAA AACAAATTTCT GGAGCACTGC TTGCTGACAA TCTGTAGTT CTCTGCTGCA  
 TTTGAGTGCA TTTTGTGGCC AGTCCATCAG GCGGTACCAT GGGATTATAT TTGAATGTGT GGTGCATCCT TCCTGGATGA  
 AGGATGTGTG AGGGACCTTG AACCTCAGCT GTATTAAACT GTAGCGCCTC CAGTCAGTGC ACTAGATGAA ACTTTTAGAC  
 ANCCTGAATT CTGTTGGGTC CNITCTTTTT CCTTTATGTA GGCAGNCTNC AGCATG

SEQ ID NO:1498: (Length of Sequence = 281 Nucleotides)

TTTATAGGAC TTCTAATCTA ATTTNCTAT AGTGTGACTA AAAGGGAGGC AAATTATTGG AACGGATTAT TCAAATGGNT  
 CCTTAAATAT TGCTATGTAT AATAAGCCAG TTATTATATC AGGACCATGT TCTCTGTAGG CCACTGTTTT NCTCTCTCAT  
 TCTCCAGTGG CGGCGGCGGG GAAGGCGGAG GCAGAGGCAG CAGCAGCCGC GCTGGCTGCA AATGAATGAN CCCCCAGCTT  
 GGGGGGAGGA CTCCAGGTGA GCCTCTGCCC TCGGGAGGCC C

SEQ ID NO:1499: (Length of Sequence = 395 Nucleotides)

TTTTATCACA CCTGTTTTT CAAGGGTCCT GTTACGTACC ATTACCAATT CTGCTTAGCA ATGGCTTGTG AGATGGCAAT  
 TATTCCTTCA GCATGTATTT TNATGTTTAC CTTCCTCTCA CCTAAATTC TCCCCACCC CAATAACAAT TAGTTGTCT  
 ATTTGCATGT AGCCAGAGCA AAAAATGATT TCTTCCCTT AAGTTACTAT TATTATAAAA GGGACGATAA ACACATGAGT  
 CATTATACCA CAAGTATAGT GTGGAAAGGA CTCTAAACAT AGGCTCACTG AAGAAGGTGG CATTTGGGCC AGGGCTCAAA  
 ATAAGGCAGA TTCAGATTG AACTGAATAG ATGGAGGAGT CATTTCAAAC AGAAGGAATG NCATAACATG TGGAG

SEQ ID NO:1500: (Length of Sequence = 272 Nucleotides)

CTGAGTAAGN GTTCCCAGTC GGTCCCAGTG GTACAAAT TTNTGGCACC GATCATTGAC ATTCACAGCG TCGTGATAGT  
 CCAGTTCATT GAGCTCCTGC GCGATGGCTG CGATCTGCTC CACGCGGTCC TGGTGCCTG CCAGGTGCGT CTOGAACGNC  
 TCGTGCTTCC GCAGCAGAGC CGNACCTCT NINAGCGAGC CCGACTCGTA ATCCTINTGC AGCAAGATCT GCTCTTTGCC  
 ATAAGCCCAA GTCTCGTGC TTGAGGCCTT CT

SEQ ID NO:1501: (Length of Sequence = 394 Nucleotides)

TTTTTTTTCC TGGACCTGTC ACAAGCTTTA TTGTCCCGAG CACAGACTCG CCACACTTCA ACAATTCCAC TGTGGGGAGG  
 GGAGGGGTGA ATGAAGGACC TGGGGAGGGG ACATGGCTGA GCCACANCOG GGCGGCCACA CGGGGCGGGC TGAGAGGCC  
 ACGGAGGCAG AAGCTCCCAA GGAAACGCT TCTTGGACAC CCGTCACCAG GAGCCACCT CCGGGGGCTC AGNTCCTCCC  
 GGCACCTCC TAGATGGACC TCTGGCTGTT AGTAGACTAA TCGGTGCCCC TACGATGGG GCAGAGCTGC CTGATTTTGT  
 CTAGAAAGAG CTGTATTGA NCTTNGGTTA GGNCACTAAA GCATCGTTCT AGACGGCTGT TAATAGAACT NCAT

SEQ ID NO:1502: (Length of Sequence = 373 Nucleotides)

GAAACAAGGC ATAATGTTGT CACAGAATCA GAGATCCAGT CTCACITTTT CACAAATCTC CAAATCTCCA GTCTTATCTT  
 GTGTGCTCTA ATGGTTTGGT TCAATCCCTT TCCAATCTT GTTTTCAAAG CATGGGCCT GAGTGTTCT CACTCCTCCT  
 AAGAAAGGAG CTTGGGTGGA AGGGACCATG CTGACCTCCT CCATCAGAGG GCTCTTCCAG TAGTATTCTC GGATGCAACC  
 TCCATTTCTC AGTTACCATT ATTTCTGTGA TCAGCTTTGT CTTTCTGGN GGGATGCACA GTGATCGGG CCACCACTGT  
 TGTGTCTGTG TGCTTCTGCT CTTCCTATG GTTTCAGNT ATTTTCTGG GTT

SEQ ID NO:1503: (Length of Sequence = 266 Nucleotides)

GNCAACAGGC CAGTNTTTAA AGAGGGTCAA GTGGAGGTGC ATATTCCAGA GAATGCTCCC GTAGGTACCT CTGTAATTCA  
 GCTCCATGCC ACTGATGCAG ATATAGGCAG TAATGCTGAA ATCCGGTACA TTTTGGTGC CCAGGTGCGC CCTGCAACCA

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AAAGACTCTT TGCTTTAAAT AATACTACTG GGCTGATTAC ANITCAGAGG TCCTNNGATA GAGAGGAGAC AGCCATTAC  
AAAGTGNCAG TGCTGGCTAG TGACGG

SEQ ID NO:1504: (Length of Sequence = 311 Nucleotides)

ACTGGATGGA TGTTTGATCT GTGTGGTCA TGAAGTTGTT TTTTTTTTTT TTAAAAAGAA AACCATGATC AACAAGCTTT  
GCCACGAATT TAAGAGTTTT ATCAAGATAT ATCGAATACA GCATGGGATT GGGAAAGTTA ACTAAAGGTA TTTGAGCTTG  
CACTGGATCT TGAAAGGTAG AAAAAGGGAG CAGGAGGAAA CTCATCCAGG TAAGAAAAAT AGACTGTNCA AGATGGGCAT  
GAGAAACAGT GAGGTCCCNV GCTGGAGGTG GGTGCTAGTC ATGTTGAGCA CTNCTGGCAG GAGAGGTTTT T

SEQ ID NO:1505: (Length of Sequence = 363 Nucleotides)

CCACTCATGG CAGAAGGGAA GGGGAGCTAG TGTGTGCAGA AATTGTATGG TGAGAGAGAA GAAACAAGAG AGAGGGAAGG  
GAGATAGCAG GCTCTTTTCA ACAACCAGCT CTCATGGGAA ATCATAGAGT GAGAACTCAT TCACTACCAT GAGAATGGCA  
CTAGGCCATT AATGAGGGAT TCGCCCTAT GACCCAAATA CCTCCCATTA AGCTCTACCT CCAACACTGG AGATCACACA  
TCANCATAAA ATTTGGAGGG GTCGAATATC CAAACNTAG CACTTGGAA CCACCAGAAG CTGGAAGAGG CAAGGAAAGA  
TTTNTCCTA GAGGCTTCAG AATAAGGTAT TGCAATTCTG AAA

SEQ ID NO:1506: (Length of Sequence = 177 Nucleotides)

CGGACAGAGC AGGGCAGAAA AATGAGGGAA GGATGACAGA AGCTCATCAG AAAGCCAGTA ATACATAAGA TTAGTTTTNT  
CAGCAAACC TNGTAACTT TGACGTTAAA AGACAAATAT TTTGATCTCT CATTCCCACT CTCAAAAGG TTTCTAGTTC  
ATATTGTTTT GCTAAAA

SEQ ID NO:1507: (Length of Sequence = 345 Nucleotides)

CTTGCTTGAT TTTCCCTGT GTGTCAGAGA ATGTGCACAT TGAAAGAGAG GGAGCTCTCC ATCACCAGA GAGCCCAAAA  
ATAGCCCAAC TGATCATAGC CGTTGTAAAA ATATTCTAGG ATGTAAGGAA AGATCCTTTC CCAGTCTGAT GTCCTTGAC  
TTGTGATTG CTAAATTGA GAAGCCATCA CTACACAAC CTGTTTTATA GACAAATCCT TCCAGTTTCA GAAGAAAAAA  
TGTCATCTAT CTCACCTCC ATCTCTTTT CAACTTCGA TAGATGAGAA GAAAATGGT AAATAAATT TTTAGAATCA  
GTTTTGCAAG ATTGGTTTC AAGGA

SEQ ID NO:1508: (Length of Sequence = 326 Nucleotides)

AGTTGGATTT CAGCTACTCA GAGTAATGG AAAAGGCCAC AGCCTGGTGG GCTTCACAGC TTTCAGAGAC CTGGTAGGGG  
ATGGCTAACA GGTTCNCTG CCAGGAGACA AGTGGCAGAC CCAGGTGTGA AACTTTTACA GGTCCACCA AGCCTTCTT  
ATGGAGCACA GAGCATAAGG ACAACTTCTG CAGAAATGGA ATGGGGTACT TGGAACCAA AATACATACA CCTCCTTCC  
CACCTGCCTC CAGCTTAGTA GCCCATAGTC CTCCTTGTCC CTCACACTGA GCCAGGCCT GNCITAGATG ATGAAATGCA  
TGGCCT

SEQ ID NO:1509: (Length of Sequence = 329 Nucleotides)

AGTATGGGTC CCTTGGTACT ACTCAAGGT TACAATATTG CATTAAACAC ATTGAAAAAT ACACGAGAAC CTTGAGGGAT  
CACATTTTAC TGCAATATGT GATTTCTGG TGAGACTCCT TGTGCAGAGA TGATTAGCTC ACAGAGCGTT GTAAGCACGT  
ACTCGCAACA CTTGAGCATG CCGCAATGGC AACAGGAGT ATCTTCACAA TTATGATGGT AGTACAGTAT GTACTGCAGT  
TGTTTACACA GTTATGATTT AGTACTACAT CTTTACANTT GGTATTTC TTNCTATTTT GAATGGTATG TACTGTCTGT  
GTGTACATA

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SEQ ID NO:1510: (Length of Sequence = 247 Nucleotides)

TAGGAAAGAG TAAGANCTTC TTINCAGGCT GGAGGTGCTC GTATGGTGGG ACAGGAAAGG GGAAAAGAGA AAGGGGCAAC  
ATGGCAGACA TACCACGGTT CCTACAGAGA TTAGGGGCG CCCTGGCCCG GGAAGTACAC AGGGCAGAGA GCTGACTCTC  
AGGCCAGGAA GGAGTTTAGC TCTNACCCAT CCTCANGGAC CACGGCTCTC CCCCAGCCTC AGCTGACACA CACACAAAGG  
AGCGTTT

SEQ ID NO:1511: (Length of Sequence = 369 Nucleotides)

CCACTTGCTC CTTTATTAAAC TGINCTTCCT GTAGTGTGTA TTTGGGATCC ACTGGGAATC ATAGAAAGGA ATCAGTGCTA  
GGNTCTGTTG GGATTGCACC CTGAGGGATG TGGCTTTGGC TTCTCTATCA ACCTTCTGT TCCCTTGTC TATAGGAGTT  
AAGTCCCTTT NATGCCCCCT ACAGTGGATT ATAGCTATGG CCTGTGGCAG GTGTATTGTT TACAATAGCT GAAGAATTTT  
AGGCCCATGC TTTATGGGGG AGGGTTTTNC TAGCTAGTAG TCCCTTTCT TTCTAGATTG CAGCATAAGC GTGAACCNCC  
AAGGAATGCC ATATTTTAGA ATCCTGTNAT AGGATGGTTA AGGCTTTTT

SEQ ID NO:1512: (Length of Sequence = 236 Nucleotides)

ATGCATTAG AAAAGACAGC CAAATGACAG ACTGATAAAA TATTTTCATT ACAAATTGG TTGAGAACTA CGTGTGACG  
TAAATGAAGT TTCTATTACA CATGTACTAA CAGAGACTTT TCATTACATA TTCTAGGATA TATTTAAAT ATATGTATAT  
TTTGATATTA AGGGAATATA TTTGTGTGTC ATTTTACAAT GTGTAACTAC ATATATATTA NGGCCTTTCC AATAAA

SEQ ID NO:1513: (Length of Sequence = 408 Nucleotides)

CATTAAATATT CTCAGTGTG GAAATATTTT NATATTGCCA AGACCATAAT GTGAGNGTG CAGCTGCATA ANTCCCTGAG  
AGAAGATTAG TGGGGCTAGC ACCTTACAAG GAAAGACAAG CTGTGTGGCT GGGCCCAAG ACAGTCAAAT GTCTGCCTGA  
CAATCTCCAC ACAGAAGGGT TGCTCAGATC ACTTAGGACA CCCAGAAAGA GCTCACAAG GGCAACAAC CTAAGGCTGN  
TATTCTCCAT CTAGCGGTAC TTACCTGGGA ACTGAGTGGC AGTGGACAGG AAGCAGGCC TGGGCTAGGG AGACCCCTAG  
GAGGAANGGG GACCCAAGAA GTTAGAAGTC CATTCATTCA TATACTCAIT CATTGAGCA ACATGCGCTT GACACCTTCT  
GTATGCT

SEQ ID NO:1514: (Length of Sequence = 359 Nucleotides)

TTNNCCAGGC TGGTCTCAA CTCCTGGGCT CAAGTNATCC GTCCACCTTG GCTTCCCAA GTNCTAGGAT TACAGGCATG  
AGCCACTGTN CCTGGCTAGA AAATNINITT TTAAGGTTA GGATGTAGAA TTNCCTAGCT ATGTAGGCAA GGCAGGAGGA  
GAGGGGCCCA GTTGGGAAGC ATAGCCACA AGAGTATGAG GGCTGANCC AGGATGGTGG CAACAGGGAT GGAGAGGAAG  
GCGTGCCAGG GCATGGTGGC TCACACCTTA TAATCTAGC ACTTTGAGAG GCTGAGGGAG GAGGATCATT TINAGCCAA  
AAGTTAGAGA CCAGCCTGGG GNAACATAGT TAAGGACAC

SEQ ID NO:1515: (Length of Sequence = 343 Nucleotides)

GAGCCCCTTG ATGGCAAGAN CTGACCCTTC CATCCTGGAG AAGAGGAGAC CAATTINATA TTATGGAGGC AGAATATACA  
GGACTGTGTG ACTAATTGCA CATGTGTGTC CATGGAGCTT GAAGGGGACA GAACCACAGG TGCAAAACTG GTGTAGGTAG  
TGCTGGCCAT TGCTCAGAAC TTTGTGTGAG TTGAGCCAG GCCTCTGGTT GCAGGACTCG TGAATGGAGC AGTTCTGAGA  
ACCACCTTT TGCTAAGGGA GCTTNGGAGC CACATGGCTG CTCCCTTCAC ACTGGGTAAC AGTGTAGTAT CCTGTGAGAG  
AATAAACGTA TTCATTTAAA AAG

SEQ ID NO:1516: (Length of Sequence = 380 Nucleotides)

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TTTTGCCTTA TTCTATCCGA TTTTTCCTT AAGCTTCTAC CTGGNATTIN CCTTTGGAAA AGTCTCTGAG GTTCCACCAA  
 AATATGGAAC TINATTTTGG ACACTTTGAC GAAAGAGATA AGACATCCAG GAACATGCGA GGCTCCCGGA TGAATGNTT  
 GCCTAGCCCC ACTCACAGCG CCCACTGTAG CTTCTACCGA ACCAGAACCT TGCAGGCACT GAGGTAATGA GAAGAAAGCC  
 AAGAAGGTAC GTTCTTACCG CAATGGGGAC CGCTACTTCA AGGGGATTGT GTACGCTGTG TCCTCTGACC GTTTTCGCAG  
 CTTNACGCC TIGCTGGCTG ANCTGACGNG ATCTCTNTCT GACAACATCA ACCTGCCTCA

SEQ ID NO:1517: (Length of Sequence = 411 Nucleotides)

TGAGCAAAAC ACAGAGGACT GCACCTCTAG TGGCTCGTAA TGAGAAAGAA GATGGTCTCA AACCTGAGAA AGATAATGTG  
 GAGTGGACCT CTGTTGTCTC AGTATTAAACA GTCCCTTCTA GGAAGTAGGT AGCATTTCTG AAAATAGAGT GAAGCAATTG  
 ACTGATGGAT TTAATCTTTA AACTGCTTAG GTAACCATCA ATCTGTAATG AGCTTAATAC TCTTAAGTAG GTGCTATTTT  
 NCATGTGTGC TACTTTGCCA GTGATAAAGG ATTACGAAAA ATTCTTTACC AGAGGAAAAA AAAAAATTGA ATGACCTTTC  
 TTGGGAAGGT GGTCCCTTGT TTGTGATCAA ACTTTGACAA GAACTGGTAA TTAATTTCTT CTAAGGAATT NACCGTTCTC  
 ATAGTGTGTT T

SEQ ID NO:1518: (Length of Sequence = 388 Nucleotides)

GGTGGGCAGC TTCTCTCTGC AGCTGCTCTC CCATCATCTG GCTGAATATG GGGCTTTINAT GGGCCTCAGG GGAGGAAGTG  
 TGTGCNAAAT GGTCCGTGGG CAAACATGGG CGGGCCTGGA AAAGGCACCA CAAGTTCCCA CCCAGTCAG TAGGATCAGC  
 AGTCTGACAC CCAGGCTTCA GGCCCTCCCC GACTTGAAGG TGGTGTCTCA CCAAGGACTC ACCCACTCCT GCCCAGGAGC  
 TTGINTGCCT CCGTCTGCCA TTTATGGTGC CCAGGCTGTT TGINCCAAGG AGTGTCTGTG GGCCAGCNCCT GAGCTGCCCT  
 CAGCACCCCC TTGGCCTCTT TTCTGTNCTC ATTGGTGCCC AAAGTCCGCA GCAGGCTGAA GTGGCAGG

SEQ ID NO:1519: (Length of Sequence = 358 Nucleotides)

TTGGTTAAGA CCAAAGTCAG ATCACTCCCT CCTAGTCCA AACCTGCAGT GGCTCCCAAT TCINTCAGCA TACAAACCCA  
 GATCCTCAGG CTGCCATTIN TGGGCTGAAT CCGTCCCTG CTGTCTGATC CCACCAGACA TAATGGAGGC CTGAGGTTCC  
 CTGAACACTC CTAGTTTAGC CTTAAGTTAA GTATTGTCAC ATGCTGGTTC CTATGCCTGA GATAATGTTT CACATTINAT  
 CCCATTGCTT GCCAGAAATA GAAACCCCTC CACATAATTN CAAAACAGAG TTTACANCAC AGAGCTTTGG GTGACTGCAG  
 GCCTCCAAGA ANGGNAGGCA GAAGGGGCAC TGAAGAGT

SEQ ID NO:1520: (Length of Sequence = 379 Nucleotides)

CCAGAGTTAA ATATGCCAG GCTGAAAGAA GGTGTATAAT GTATGGNCGT NCTTATACCA AATGATTCTT TTGGAATTTA  
 AACAAATATG TTTAGTATTT TATTCCTAAT TTAGGAAGAA AAAGCAACTA AAGTTGINCT GACATTGTAC ACAGATGAGT  
 AGCACGTAACT TTTTATTTAG TAAGCCCAT AGGATAGTAN GGNATAAAG TTGTTAGTGA GCAAAACAGG AGTATCCTGC  
 CATTGCTTTT AATTCTNCTT GTGATAGTTT TGAGGGTACA ATAATTCCTG TGTGCGTGTG ACTCAAGCAA ACCAGAAAGT  
 GTCMTTGTGA AATACGCATT TTGGGCCTCA TCCTCATGGA GGTCCCGTT GTTGTGTTG

SEQ ID NO:1521: (Length of Sequence = 339 Nucleotides)

GGGACAGGAA GCCTCTTGGG TTGGAATCAG ACTCAGGAGG TGAATCAAGC CTCAAGCTCA GAAGCCCTCT GTNACCATCT  
 GTTGAATCAG AAGCATGCCC ACCATCCCAT GCAGTGCCTT TCCAGGCACT GTCCTGTAGC AGACGGAGTT CAGGCTTTGG  
 AAGTAGACAG ACCTGGGTTC AAATCACAGC TCCGCTTCTT CCGCTGAAG CTCCATAACC TAGGATAAAG TCGCTAAGCC  
 TNCCTAAGTC TCAGATTTCT TACCTCTAAG GTGAANGGAT TGGATTCCAC TTTACTTCCC CCCTTTTCCC TTTANGGACT  
 CTGCATCCTC NPTTGCTTG

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SEQ ID NO:1522: (Length of Sequence = 405 Nucleotides)

GTGAATTTCA AGCAATTGTT AATGGGGACC AACAGGGCTG CATTAAGAAA ACCACTTTNN ACTGATCTCT CCCCCACATA  
 TTTTAAATTT GTCTTGCTTT GTTTATTTTG GTTATGCAAG TCCTTTCTCT TCATGAAACA AGTGTAAGGC TCTAAGGCTA  
 AAATAATAGT TATTTTTGTG GGGCCCAAT AGCTACTTTT GAATTTCTTT CTTTAGTATA TCTCAAATCT GGGGAACATG  
 GAACTTGAAG ACTCCTAACC ATGAAGCATT TGGAAAAATA CATATCATTC ACTTTTCACA GAACCATTTT CTTAAAAATA  
 AGGGGGCAAT ATCCAGATTC ACATGCATGT TCATAAATAA AGCTTTGGTT TTAAACAAA TCCACACCAG CAATTATTTT  
 CAGCT

SEQ ID NO:1523: (Length of Sequence = 284 Nucleotides)

AGNTCACAGA ACTCCAATTC TTTATTAATC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGNGTAAA  
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGNTTCA AACTGCGAT AGGTACTTAT GGTGGGTATC  
 TGGTGATTCT NAGTTGGCAC AAATGCCCTG CCTAGCCCC TTAAGTGGT CACTTTCACA GATGNGTGT TTTGTGTGTG  
 GTGTGTGTAG TAGGCAGGAT TGCTTACAC TGGGGAAGAA AGAC

SEQ ID NO:1524: (Length of Sequence = 299 Nucleotides)

GTGCTGTGAC GTGACAGTTT TGCTGATCA CATTTTAGGA AGATGATGCT GTTCTTNCIT CTTAAGTATT TATTTTATC  
 AGTCAAGTGA TAGGAAGTTC AATTTCAAGT ACAAGACATT TGGATCAAGA AGTGACTATT ATTTATTTAT TTNAGATGGA  
 GTCTTGCTCT GTTGCCCAAG CTGGAGTGCA GTGGTGTGAT CTCAGCTCAC TGCAACTTCC TCCTCTGGG TTCAAGCAAT  
 TCCNCTGCCT CAGACTCCCG AGTAGCTGGA ATTTACAGGC ACCCACC GG ACCAGTGAA

SEQ ID NO:1525: (Length of Sequence = 398 Nucleotides)

GCCCCATGAAG CAGCTCTCGT GGATTGGAGT CTCATGCTG CAGCTCTCCC ATACTGGAGT TGCATGCTGG TGGTCTTACA  
 GTGCTGGTGT CTGGGCAGTG GCCTCACTCC CATGGCTCCA GGAGGCATTG CCTGGTGAG GGATCTCTGT GGTGGCTCTG  
 TCCCTGACAC AAGTTCTGC CTGGGCTTCC AGGCTGTCCA TGATATCCTT TGAAATCTAA TTGGAGGCTG GCATGACCCC  
 ATGGCTTCCA CACTCTGTGC ACCTGCAGAA TCAGCACCAT GTGGACACTG CCAAGACCTA CCTACCACCT GTGCTCTCTG  
 GAGCAGCAGC ACAAGCTACA TCTGGGGCTG CTTGAGCCAT GGCTGGGGCT NCCAAGGAGC AGAGTCTTGA GGGTGGCC

SEQ ID NO:1526: (Length of Sequence = 318 Nucleotides)

GTCTCTCTCT ACTGCACCAT GATGCCTTTA AAAAGAATCT AGGGGCTGGG CACAGTGGCT CACGCCINTA ACCCAGCACT  
 TTGGGAGGAG TTCATTGAG CTCAGGAGCT CGAGACCAGC CTAGGCAACA TAGTGAGACC CCGTNTTCCA CTAAAAATGA  
 AAGCAAATTA GCTGGGTATG GTGGTCCATG TCTGTACTGT GGCTAAGCT ACTCGGGAAG TTGAAGCAGG AGGNTCACTT  
 GAGCCAGAA GGTCAGGCT GTAGTGAGCC ATGATTNIGC CACTGCATTC CAGCCTGGGC AACACAGTNA GACCCTGT

SEQ ID NO:1527: (Length of Sequence = 313 Nucleotides)

TTGGCTAGAA GGGAGGCTGG AGCCTTTTCAT GGTGGCTTTT GAATGCCATG GTGAATAGIT TGTCTTTTAT TTGTNATTGA  
 ATAGCAATTT GTACACTTCT GAGCTATTAG AGTGAAATGA TTAAGCCTGT GGTTTAGGAA GAAAGAGCCT ATTAGGGAGA  
 TAAATCTTTC CCTAGTTGTA GGAAGGGTTG GAACAGTATG ATATGGAGAG GGTAGTAATG AATGANGGAA TNGAAAACGA  
 GAATAATTTT AATGATACTG GAGGTGCAGT ATACAAGTTG NGCAGTAGGT TTATGTCTAG GAAGATAAGA AGT

SEQ ID NO:1528: (Length of Sequence = 405 Nucleotides)

GCGTCTGCTA CCGCCACGCG CACCGCCACC GCGCGAGT GCTGTCTCTA TGGCGAGGAG GAGGAGGAGG AGCGCGAGTC  
 AGCGACACAA GTACATAAAT AAAGGATAAA ATATTTTATG AAACAAATCT TCAATCAAGT ATAACATTTT GATGCTTGGC

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ATCTAGACTC CCTTGTGCCC TCACTATGCC AGCGGAAGT TAGATCATAG CCAAAGAATT TGTGAAGTTT GGGCTTGCAA  
 CTTGGATGAA GAGATGAAGA AAATTCGTCA AGTTATCCGA AAATATAATT ACGTTGCTAT GGACACCGAG TTTCCAGGTG  
 TGGTTGCAAG ACCCATGGA GAATTCAGGA GCAATNCTGA CTATCAATAC CAACTATTTT GGTGTAATGT AGACTTGTTA  
 AAGAT

SEQ ID NO:1529: (Length of Sequence = 241 Nucleotides)

GAAGGAGAAA CACTTCTTGC CTCCATAATT CAGACAGTAA ACTGATCGCT GAGATTGAAG TTTGCTTGTT TCTGGGGAA  
 GCTTNAAGAT CCTCGTGGGA CCACCATCCC CTGCTCAGTC CTCCCTGGAA GGGGGCACTG GCTGGGTATG AGCCGCGTCA  
 CCGTTGGGTT TGTAACITTN TGGATGGTGC CTGNTTTCCT CTTGGGGCTG GCTGAGGAAA GGGGAGGCGG TAGNGTCTG  
 C

SEQ ID NO:1530: (Length of Sequence = 356 Nucleotides)

GGTCTCATGC AAGGGTTTCC CATGCCGTGA AGTGTGTTTG TAATCCCACA TGTATCAGGT GCCTGGCTGC TCTGGGACTT  
 GCAGTAATTG TCTCTTGTTT GTTTCAGGTG TGATCCCCTG GGCCCGTTTG TGTGCGGGG AGAAGACTTA GACCCTTTGG  
 GGTGAGTACT GCTGGGGAGG TGGCAGCAAC ACAACTTGCT TTNTGGCTT TTNAGCCCCA GCTCATCTTC TAATTNAGA  
 GTTTTCGGTC AGTCTCTTCC TTTGGGNGTN GAGGAGGCAG TTGTTTGCTG AGCAGCTGAG AAAGCACTGC CACATACGCT  
 GGCCCTCCA CACCTAGAGC GGTGCAGGAG AGCACT

SEQ ID NO:1531: (Length of Sequence = 379 Nucleotides)

CCAACAGATG CTGCTACGTT TCCTTCAAAA TTGTTAAACA TCTCTGCGG AAGAAGCTGC TTAGTTATAT CCAGCGATTG  
 GTTCAAATCC ACGTTGATAC AATGAAGGGT GGGGTATCTA GCAGGATGTC TAGTTCACGC ACTGGGTGAA AAACAACCAG  
 AGCTGCAGAT AAGTGAACGA GATGTTCTCT GTGTTGAGT TGCTGGACTT TGTCATGATC TGGGTGATGG GCCATTTTCT  
 CACATGTTTG ATGGACGATT TTATTCCACT TGCTGGCCCG GAGGTGAAAT GGACGCATGA ACAAGGCTCA GTTATGATGT  
 TTGAGCACCT TATTTAATTC TAATGGGATT AAGCCTGTCA TGGAACAATA TGGGTCTCA

SEQ ID NO:1532: (Length of Sequence = 307 Nucleotides)

GATAAACTTG AGCCACCAAG AAGTGGACTC TGCTAGGAA GACAGTTTGC TGAAGTTAGA AAGTACTGGT CTAGGAACCA  
 GAAAACCTGA TTCTNCCCAA GAGTTAGAAT TGTNAGINAG TTCTTNCCTG TTTTNAGTTT CTTATCTGT AAAATAATTA  
 CCCAGTTCAA TTGGATAATC TCTATGATCC CTCCACATT CTGCATACCT GGATATCTAC TGTTTCTAAA TATTTTGGCA  
 TTTCTTATAA AGCCCTTTCA CATTTNCTTT ATTATTTTTC CCTCAACAAGA ATTCCTGAAA TAGGATA

SEQ ID NO:1533: (Length of Sequence = 337 Nucleotides)

ATGGCTTTAT TTGCTGATTG AGAAGTGGTC CAGCCGTGGG CTAGCAGTCA TTTACATATC AGTGACCAAA TGCAAACATA  
 CCGTACTAA CAGTGCTTTG GTCCATGACA TACCCTTTGG ACAGCCCCAA GCTGAAACGT CAACTCTATC TGGGGTACT  
 TGCTTATACA AAGATGTTAC TCTAGCAATT GTTGCTTGAG GGCAAGACCN GATGATTGTC ACTAGTAGGA AGAAAGCAGA  
 AGTGATGCAG CTTACACTGC ATAGTCCCTA CCCTTNTGGA TTAATGGAA AAGTTGCTCA AACATAAACT TGTTCTTAAC  
 AAAGGTGGGT AAGANTC

SEQ ID NO:1534: (Length of Sequence = 317 Nucleotides)

ATGGGCATGT GGGTACTACG TTAAATATT TAATTATTTT AAAAATAAAA TAGGAAAGAT AAAATAGCTT AAAGTGTATT  
 GATGCTCTGA ATAACTTTAT GAGTGAATAG ATACTGAAAT TTGAAGTCAG TGTTTTCAC AACAAATCAA GATTTGGGAC  
 TGGACTTACT GGGTTGGGA CTCTTAGGG ATAACGGTGG TGCTATGAGC ATGCTGGAAA GATGAGAAGC AAAAGCCTGG



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AATTGGGAGT CCTGTACTGT CTTTAGGGTA TGCAAAGAGG CTCCTTCTTT TCTAGGTGTT CATCAGTACA ATATGAC

SEQ ID NO:1535: (Length of Sequence = 323 Nucleotides)

ATATTACATT GATGTCAGTC TTAAAGATG GAGTAGGACT TTNCAGGCAG CAACGAAAGG GAAGGACATT TCAGAAGCAG  
AAATACCAT TGTAAAGGA TGACAGCCAA GAAATATTAA AGCATATTTG GAAAGTATTG AAAATCTCTG TGTGGCTAGA  
ACTTTAGATG AAGAATCAGA TACATCTGGA GAAGGAGATT NAACNGATG ATCATAAAGA ACATTTTATT TAGGCCATGG  
TAAGGCTTGG GCACINIGGA GCCCATGAAG GTTTTGGAC AAGGGAGTTT CCTTAGGGAG GAGTATNAAG CCATAAACCA  
AAT

SEQ ID NO:1536: (Length of Sequence = 305 Nucleotides)

AACCACATTT TTAGTGCATC TNCTCCACGC TGGATTCCAA CATGCTGGCC CGGAGCGTGG CTGGCTGGAA GCAACTCCAA  
CAGGTTTTTC CCTTCCCGT CATGTACATT ATTTATTTT GATCTACTC ACTGTCCCAA GTCCAGAGGC AGTTACAAAA  
AACACTCTTG ATGCAAACCG TGAGTGGCTA CAACACACGG ATGGGGTGG GCGCGATTCC CACAACAGGG AGTGAATCC  
GGGGAAGATG ATATATAGGG GCAAGACGGC CCCTTACTTT GCTAAGAGTA TATGGGAGCT CAAAA

SEQ ID NO:1537: (Length of Sequence = 279 Nucleotides)

GGTGGCAGCG GCGGCGCGC GACTGAAGCG CGCGAAAAGC TGAGGCGGCA ACGTCGGGGA CGGCTGCNCG GGACGGCTCT  
GTAGGAAGGA ACTTGGTTCC CCTTCCCTCA GCTTCCGCCC CAAAAGATTG AGAATGGACA GTTTAGAAGA ACCTCAGAAA  
AAAGTCTTTA AGGCTCGAAA AACGATGAGA GTNAGTNATC GTCAGCAACT TGAAGCAGTG TACAAGGTCA AAGAAGAACT  
NTTGAAACT TGATGTCAAG CTGTTAAATN GCAACCATG

SEQ ID NO:1538: (Length of Sequence = 310 Nucleotides)

ATATTTCTT CTGCTCTGAC TCCGGAAGAA CTGCACTGT TGCCTAGGCT GATAATCCCC GAAAAAAGT AACAAATGCA  
ATINTACCCC CCACCCCAT ATACAGCCCT CATATATATA TATGAGAGAG AGAGAGGAAA AGATCATGAG ACATGTCTTC  
TAGGGAAAAA AAATCTAAC TTCCCTAGCC ACTGTAGTCA TTTGAAACCT GAGTTAGACT ATGAGTTAGG AAGTATTTTC  
ATAGAGTTCA ATTAATATAT TTCTGCTCTA TGCATGGATG CTAACAGGTT TAAGGAAACA CAAAAGCCAA

SEQ ID NO:1539: (Length of Sequence = 267 Nucleotides)

GAGATTTTAC TTTGTAATCG AGTAATTTAG CCACACTCTT GTGAGGGAAC AAGCCAGAGC CAGGACCGCA TATTACCCGG  
TAAAGCTGCA GAGAAGACTT GAGACTTGTA AGATTGNCNC NGGCTGCAGT CCGTGGTCA GTAACATCTG CAACATTATA  
CAGCCAGCAG ATCAGCTCTT CCAGCTGACA GCAAATGTC TTCACACATT GCACCACTGA TTCTTTTCCC TGINCTCTTC  
CTTCCCTGGG GAAGCTGCCC TTNAACA

SEQ ID NO:1540: (Length of Sequence = 354 Nucleotides)

ATTTATTCAG ATGAAAAAA ATCAAGGCTT AATTTAAGTA ACTTGTCCTT GGTCAAGGAG TTGACAAGTG GCTGAGCTGG  
AGTTTACGAT CTCAGACATC TTCTTTGAA TCCTTGCCCT CCTTGTTGAAT TTCAGATGAC GGAGCATGAC GGCTGCATGA  
TTATGGGGTC ACCGGGCTTG TCCTGGGCCT GAGGGACCAA GGATCAGAAA GGGCAAGAAC CAACTCGNTC AGCTAGTGAA  
AGTGCAATTG GACANTGATC CTGTTTCCGG GNTTAACCTT CCGCTTGGCC TTTAAGAGGG NITCTTGAAA TGCACCAAGG  
GGGCCCTAGAG GAAGCAAGCA AACINCTTGG ACCT

SEQ ID NO:1541: (Length of Sequence = 403 Nucleotides)

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GTGATGTTAT ATCAGGTAAA ACCTGTCTAA GGAGAATAGA CAGTAGTTAG TTCAACTTAC TCATTACGTA TTAGGAAGAT  
 TAACCTGGTT ATCATTGTTT TATACATATA TATATGNAAT ATATATGAGT ATTCTGTATA ATATAATACT TTTACCTTGT  
 TTATGTATTT ACTCAATATT CTCCTTTTCC TCTAAAATAA TCTGAAGTGA CTATTATCAA TAAGTTTACT ATGCCAAAAT  
 TCATTAATTG CCTTTTCATT AACTTTTGGG GCCATAATAA ATAATAAAAT GTATTGCCAT AACATTAATA AACTACCTTA  
 CAAAACCACC AATTAAAATC AAACAACCAA AAAGGTGTTA TTTACATCTG NNCACATAAA TCTACTAAAA ATACAGGGTT  
 CAT

SEQ ID NO:1542: (Length of Sequence = 333 Nucleotides)

CTGGTACATG ANITTATAAA AACATGTCAC GCCCGGCTCT GTGGCTCATG CCTGTAATCC CAGCACTTTG GAAGGCCGAG  
 GCGGGCGGNT CACAAGGTCA GGAGATCGAG ACCATCCTGG CTAAACCGT GAAACCCGTC TCTACTAAAA ATACAAAAAA  
 TTAGCCGGGC GTGGTGGTGG GCGCCTGTAG TCCCAGCTAC TCTGGAAGCT GAGGCAGGAG AATGGCATGA ACCNGAAGG  
 CGGAGTTTTT AGTGAGCAGA GATCATGCCA CTGCACTNCA GCCTGGGTGA CAGAGCAGAG CGGGGACTCC GGAGCAATGG  
 GNAGTACAAT CCT

SEQ ID NO:1543: (Length of Sequence = 329 Nucleotides)

CCCCTGATAA ACCTATCAGA TTCTGTGAGA CTTATTCATT GTCATTAAGA ATAGCAGGGG AAAGACTGGC CCCCATGATT  
 CAATTACCTC CCCCTGCATC CTTCCACAA CATGTGGGAA TTGTGGGAGA TACAATTCAA GTTGAAATTT GGGAGGCGGC  
 ACAGCTGAAC CATATCAGTC TGTATTATCT CTCCTTTTCT CTGCTTTAAG NGACTATACG NAGGTGTGTG TTTCAGGNT  
 TATACATAGG TATTCTGAAA GATGGGGTTA TTTTCTGTTT CANACTTTGA CTAAGTGGCT TCTTTTGTCC CCTATGTGCC  
 AGAATAGCC

SEQ ID NO:1544: (Length of Sequence = 313 Nucleotides)

CGGAGATCCG TGATGTAACA AGGATTGANC GAATCGGTGC CCACTCCAC ATCCGGGGAC TGGGGCTGGA CGATGCCTTG  
 GAGCCTCGGC AGGCTTCGCA AGGCATGGTG GGTCACTGG CCGCACGGCG GCGGCTGGC GTGGTGCTGG AGATGATCCG  
 GGAAGGAAG ATTGCCGGTC GGGCAGTCCT TATTGCTGGC CAGCCGGGCA CGGGGAAGAC GGCCATCGCC ATGGGCATGG  
 CGCAGGCCCT NGGCCCTGAC ACGCCATTCA CAGCCATCGC CGGCAGTAA ATCTTCTCCC TGGAGATGAG CAA

SEQ ID NO:1545: (Length of Sequence = 384 Nucleotides)

CCCAAAACCT GGAGCTAAGA ACTTCATCTC ACTTTTGACA CCCAGCCCC CAAAATATGG AAGCCCAGGA GAGCCAGGAG  
 AATTTATAGC AGAGGCTTAA AGAGAAAGTT ATGATTTGTT TAAAGTAGAG AATAAGGTGA AAAATAAAAC CTGGTACTCT  
 GTCTGGAAGT CCTGGAAGTC TCCTTGCCCA ACCTCAACTG GCCTGTGGGC TCCTGTNTCC TTGCTCTGGG ATGCCATGGT  
 GAATGTGAAA ACAGGGGAGG TTGTGTGTGG GGGTGGGAAT GGCCINTCGG TTGCAAGGCG AGTCCTTTGC TGAGCCAGC  
 CTGAGACCCA GCTTATGGGC TTTATCCAGG TGAGAAAATN CTGGGGACAT GTGTTGAGG TTTA

SEQ ID NO:1546: (Length of Sequence = 345 Nucleotides)

TTTAAAGAAC AATGATTAG TGAAAATNCT CTCAGTTTTT TTAAATTGGT TCAGCAATTG ATTAATTACT GAATCTTGAC  
 CCTAAACTTT TTAGTCTAGA AATGTGCTTG AGGAATACAG GCTGGAGATC AGCTTTTTGA CATTGCATTC CCTCCTGGN  
 TCACATCCAT GTTGAATCA ATTTATAAAC TGCCTTCTTA AGGCTTAAAA TGATGGTGAT CTACAGACAA GTGCCTTCCT  
 AGGCACAGG TTGCTGGAGA CTGATGCCAG GCCATGGCT CTAAAGGGA ACACTGAAT CATGGCAGAA ATGGTGGAAA  
 GTAGAGAAAT GAATAGAGG GGGAA

SEQ ID NO:1547: (Length of Sequence = 342 Nucleotides)

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GGAGGCTGAG GTGGGAGGNT CACTTGAGCC TGGGAGGTTG AGGCTGCAGT GAGCTGTGAC TGCACCACTA TACTACAGCC  
 TGGGAGACAG AGTGAGACCC TGTCTCATAT ATATATATAT ATATGTATGT ATATATATGT ATGTATATAT ATCTCTAATA  
 TATTAATATA TATCTAATAA ATGTATCTTA TATATAATAA ATATATCTAA TATATAATAT ATATATTNCC NAGAGAGGGA  
 GAGGCTCTTA GGAAATTATC TTCTTGCTA TTATGTATATA TTATGCTATA TTGGGCTATT TCCTAAGAGC TCTATCGTAT  
 TATTTCATT TATTGTGAG GA

SEQ ID NO:1548: (Length of Sequence = 334 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT  
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGAAGT GGTATCCAGA  
 TAGGTTATCC TTGGAGAGTA TCCNGGGATG TCTCTTTTCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG  
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTTGAGGAA TTCACGTAAG GNATGATAAT CTGAATTTTC AGGGCTAGGC  
 TCAGAAGCAG GAAT

SEQ ID NO:1549: (Length of Sequence = 362 Nucleotides)

AGGATTCTGG GGGCTTAGAG AGGGCAGCCT GGAGAAGCCA GAGTTAAGCT CAGAACAAGA GGTGCAGGAA GAGCCACAGC  
 AGGGAAGGGA AGAGAGATCC CAGAGGAGGG GCAGAGINTG GCAGGACAAG GGCCCTGCCG TACATGCTAT GCATGAAGGA  
 AAATCTTGAG ACTAAGACTC ATGAAAAGNT CAAAATAAT TATTTCGTGT GGCCCTAGA AGACTNAAGA GACATTINCT  
 TCGCCATTG CCCAGGGCTG CCTGGGCAGG AGACAAAGGA ATNAAAAGTC CAGGGGGAAA GCAAAAATCT ATGGGCTTCT  
 GAACACATGC TTCCCGGAGC TCGTCTNCAC AGCATCTTCA CC

SEQ ID NO:1550: (Length of Sequence = 328 Nucleotides)

GGACTAATTA ACTAAGAGG TTTTGTACAG CAAAGAAAC TGTCAACAGA GTAAACAGAC CTACAGAATG GGAGAAAATA  
 TTCACAACT ATGCACCAA CAAAGCTCTA ATATCCAGAA TCTATAAGAA ACTTAAACCA TTGAACAACC AAAAAACAAA  
 CAACCCCAT AAAAGTGGAC AAAAGTCATG AACTGACACT TCTCAAAAAA AAGACATACA AGCAGCCAAC AAGCATATAA  
 AAAATGCTTG ATATCATTAA TTATCAGATG AATGCAAATC AAAACCACCC AAGTCTTTTT CTCTGTCTA GGNIAATTTA  
 TTTTAGGG

SEQ ID NO:1551: (Length of Sequence = 365 Nucleotides)

CAGGAATTTA CATGGGGAGA CCTACCTATG GCAGCTCTCG CCGTCGGGAT TACTATGACA GAGGATATGA TCGGGGCTAT  
 GATGATCGGG ACTACTATAG CAGATCATAC AGAGGAGGAG GTGGAGGAGG AGGAGGATGG AGAGCTGCCC AAGACAGGGA  
 TCAGATTTAT AGAAGGCGGT CACCTTCTCC TTACTATAGT CGTGGAGGAT ACAGATCAGC TTCCAGATCT CGATCATACT  
 CACCTCGTCG CTATTAAAGC ATGAAGACTT TCTGAAACCT GCCCTAGAGC TGGGATATTG TTTGTGGGGC AATATTTTTN  
 ATTGCTCTTT GTTTAAAAAG TGAACAGTGC CTAGTGAAGT TAGGT

SEQ ID NO:1552: (Length of Sequence = 330 Nucleotides)

GATCCAAAAA AATTTACTGA AATAGCAAAA ACGTGGACTT TGGGATTTCC TCTAACTGCT GCAAATTATA ACACAGAATT  
 GCTCAGTGTT AATACITGAN TTGTGGGGCC AAGTCTTCTG GCTGCCCTAG TTCTCTTTTC TGGCATTTGA AAGCCCTTGA  
 GCTAGCTATG GAGCTAATCT TTGGACAGGC TTTTGTGTTT CCAGGAATGT CATGCCCTTG AATTTCAT CTATATATAT  
 ACAGTGTGTG TGTATGTATA NCTGTCTTTT CACTGTAAAG CACCTNCACC CATCCCTTAT AGAAGGNGGC CACAAACAAT  
 CAAGCAAATG

SEQ ID NO:1553: (Length of Sequence = 304 Nucleotides)

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CCCTTGTCCTC ACAGCCATTT AAAAATCTTC TGAAGGGCCT CAGGGCACAA AGTGATCATT TGGGATCCTA AGTTAAAAAG  
GAAATGCAAG AGTAGGNTAC TCCAATTCCA GAGTCTTTGC AGGAGGCTAA TCCCACAAGA AGGGTAGCAT CAGAGAAGTG  
GGCATTGGTC TTAGTGGTGG ATCATCAGGT AGACAAGTGA TAGTGTGTGT AACCCATCTG AAATTCATTT TACCGTCACC  
ACTCTTACAA AGGACAGTTT ATCCCAAGG ACAGTGCTGA CGGGGAGGGG GACAGGCAGG GAGT

SEQ ID NO:1554: (Length of Sequence = 309 Nucleotides)

TGTGTTACTG ACCATGTTTT TGAGAGTAGT GCCCTAACC ACTTTGTCTC CACTTGCATA GTGTAGTGAT TTTNAGGNCT  
CTGTATGTCA TATTATAACA GAACTGACTG TATATGGCTA TTTTATCCA TAATCAAGCC AATTCCTCCA GAATATTACC  
ATCAGTATTA CCACATACAT CCTCCCAAAT CTATTITCAA AGAATAAATA TATAGTCACT CATGGTTTTT AAGNAAACCC  
AAAACACTC AACCAAAACC TTGAGGAAGG TTTTCCAGG GNTTCTACC TTAATTATTC ATAATGATT

SEQ ID NO:1555: (Length of Sequence = 326 Nucleotides)

GTTTAAAAAC TGTCCAAATG TCATTTTAAT TTATGAAGGC ACCCAGAATA AGINCTAATC TCATACTGCC CCAATATATT  
TNCTGAAGCC AATTCTCTCT TTTATTAATT TTTACTGAAA ATAGCACTTT TTTCTCTCCC CTGATAGTAC TGGGTAAATG  
TAGAATGTCC TCTAAAATTC TTTGGACCTT ATTTACATTC TCAAGAGNIT TTTTTAAATT TACCAATAAG ATGTGCTATT  
TGAGGAATTA GACTTTAGTT CAGTTGTACA TGGNITATGT CTGCTCATAT CATTCAATGC TGAGNCTTTC ATTTTATTAA  
TATGGG

SEQ ID NO:1556: (Length of Sequence = 375 Nucleotides)

CCCATCCCTG TTAGGTGCT TGTCTCTCT TGAGGAGCCT CCAATGCTGC TGCTCTCTATA CATGTCACAA TTTCAGACCC  
AGCATGCTAG GAACTGCTGC CAGCGCCTGG TTAAGCCAAT ACTAAATGGG GCCAAACAGG TGAACAGACA TTCTGTCTTT  
CTCCAAACCT CTGAAAAGA TTCTGCAACT CATCTCACAG TAATTGTTC CTAATTTAC TCTTAGGAAA TTGTGTTAA  
AGTCTGATTA GGTAAAGTCC AATTCCCTGT AATTAGGATC CTCAGTGAAG AAAAATCTAC CCATCACCAC AATTATTTTT  
CTTTCTATA GCTCCAGCAT CAGTAATTGT ACCATTATTT TTGGCAGCTC TGGGG

SEQ ID NO:1557: (Length of Sequence = 306 Nucleotides)

AATTCGAAG ACTATTCCTA TACATTAGAG TGAATTINAG ACTATCTCCA TCATTCTCCA GCCATTCTTC AGTGGGAAAA  
AAACGGTGA ATTAAGTAG TGGAAACAAG GCTTTCTCAT CTAGTCCCAA TCCAGTCGAT AAGCTGTGTT TNCCAATCAC  
TGCTCCAGCA CAATGGCCCT CAGTTTATTT TTAAGTCTAT GGCATGCTG AAGGACCATG TTCCCATGAG TGACACCCCT  
CTGTAAATGT GGTGGCACAT TATGGGCTGC TGTTTTAGAA GGGACTGNCA ACTTGCTGGG GGTAT

SEQ ID NO:1558: (Length of Sequence = 292 Nucleotides)

AATTCCTCCT TTCCAAATGT ATTTTCAATC CCTTGAGTGT CTAGGCTTCC TGCTTTTAAG GCTTNCCTTC TAACCCAGGG  
TTGCCCATTT CACCTTAAAA CATTTTTCAA TAACCCAGAA AAAACCAGN TGAACATACC CAAGCTCCGG AACCAGCAAA  
TNTTGTTCGA ACCCCGCTGA TGACTCCAG GGAAGCCAA GAGGACAAAG ACAAGGATGA GGACGAGGAC CCAGGGACCG  
NTGGTGAATG GCAACTGCTG TCAACTTCAC TTTTCAACCT CAGNCAGTTT GT

SEQ ID NO:1559: (Length of Sequence = 246 Nucleotides)

GTGGTCCGTT CTCAGCCCAA CAAGAGTGAT CCTTTTAAGG TCCACACAG CTGCCTCTCC TTCTCCGCA TGAGCCTCTG  
GCATGGTCTT TCCTCCAGCT GGCCCGGGC TGGGCAGAGC CTCTCTCTGC CGGGGCCCTT GCCCAGCCCC TCCITGCTT  
GGAGTINAGG TGTTTATACC AAAGACGGAA CCATTTCGCC TTAAAGAAA ATATATNCAG AAGCAGCCGC TGCTCGNAG  
CCCTGG

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SEQ ID NO:1560: (Length of Sequence = 383 Nucleotides)

CCAAAGGTAC AACAGATTTA CTACATTAA GACAGGAATC TTTTCTAATC TCTGTGCCTA TTAAAGAAGC CACCTGCTTA  
 GAAGTACTTT GTAGATGAAA AAATACTTAT GAATCCACTG TAACTTCACA ATCTTGAATG CCAAGGAAAA ACTTTACTAG  
 TTTCAITTTAC CACTATTCTT TAAAGTNCIT TTIGATTTTA TGTTTTAAAT TTTTAAATTT TATATTTTGA GACAAGGTCT  
 TGCTCTGTTG CCCAGGCTGC GGGGCAGTGG CATAAACGTG GCTCACTGTC ACTTTGACCT CCTGGGCTCA AGGAATCCTC  
 CCATCTTAGN CTCTGAGCA AACTGGGNCC ACAGGCATGC ACCATCATGN CCAGCTAATT TTT

SEQ ID NO:1561: (Length of Sequence = 313 Nucleotides)

CCCCCTCCAC CGCAGTCTGT GCCCCCGTCC CCACCACCAC CTTCCCCAAC CACTTACAAC TGCCCCAAGT CCCCCACTCC  
 AAGAGTCTAC GGGACGATTA AGCCTGCGTT CAATCAGAAT TCTGCCGCA AGGTGTCCCC CGCCACCAGG TCCGACACCG  
 TGGCCACCAT GATGAGGGAG AAGGGGATGT ACTTCAGGAG AGAGCTGGAC CGCTACTCCT TGGACTCTGA AGANCTCTAC  
 AGTCGGAATT NCGGCCCGAA GNCAACTTTC GNAACAAGAG AGGGCAGATG NCAGAAAACC CATACTCAGA GGT

SEQ ID NO:1562: (Length of Sequence = 320 Nucleotides)

AAACGGGCGG CGAACCGCAG TATCATGCTG GCCAAGAAGA TCATCATTA GACCGAGGC ACGCCTCAAG GAATAGGTTT  
 TCCTAGTGTG TATCAGCGAG TTATCGTCAT CTTTTTGGAG TTTTTTGTCT GGGGACTATT GACAGCACCC ACCTTGGTGG  
 TATTACATGA AACCTTCTCT AAACATACAG TGTGTAACAG TTCTAATACA GCAAATTTAA TACAATTTTT TATTAGATCA  
 AAATTCATA GAATGTTTCA TATGTTTTAA GGAAGGTTCA TTGAATTTCT TCTTTTCAAT GGAAGTCTTC ATTTGGAAAA

SEQ ID NO:1563: (Length of Sequence = 299 Nucleotides)

GCACAAGCAT GACCTGAACC TGTCACCTGC CGTINAGTAT TTCACATTTC TATAGTTTTT TGIGATTCTG CCTGCATTTA  
 ATCATCATCA CCAACAAAA TAGTTCCTCT GAAGAATTAT TTTATACTAG GATTCTCAGG NTATCTCTC TCAATCTCTA  
 TTGGGATCAC TCCACTCTGA CTGTACACT CATTTTCCCA CTGATGTAGC TGTTCTCAAG TTAGAAGTTA AGTCTCTAGT  
 CTTCAITTTA TCAGTCATCT CAGCAGCATT CATTATGGTT CAGGCACTCC CTCCTATTT

SEQ ID NO:1564: (Length of Sequence = 325 Nucleotides)

CAGATGGNTC AGTTCATACT CTGGCAGTTA ATTTTATTTT CTCTAAATAA AAATGGACAG GTTAATTTAT TAAGCAGCTG  
 TGTTATCAAT ATGGTACGTG TGTGNTCTTG TATAGATAGA TGTATATGTA CATAATAAC TATACATTTT NCTGGACACA  
 TAATATTINA GGTGCCATTT GTATGCTAGA CACIGTTCTA CCATCAGTAA AAAAGCACTG CCGTGTTTTA CTGTGATTA  
 AAAACAAAAT TCTGAAAATA GTGANCAATG AGGCTTACAA CATTGTGTAC AGGNTAAGGN ATCTCAATTT AGGAAAATGT  
 TGTCA

SEQ ID NO:1565: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTA TATTAGTCC TGCTTTTTAA AAGTTTATTT TACATTTTAA ATACAGTATT TTTCTCATAA AAAAAAATC  
 CAGGAAGTGC CTAACCCAT GGTTCCTATA CCATATGTAC ATGAAAGCTG ACAGAGAGCC TGACAAATGT TCTGGATGTA  
 ACAGTATGAA CACCTATGAG CTGGGACTAC TTCTGANTCA AAATTAATAA ACACAAATTA AGCACTGCTT AAGAAAAA  
 AAATCCAGTT TCTGAACAAC CAAAAGAGAA CAGAGTTAGA TATGTACAA ACCAGGTATT AAAAANCAGN AAGGAATACA  
 GCACACAAA ACTCAACAN CCCATATGTA GTGAAGTGT TATACTGCAG TTAATGAAAA CC

SEQ ID NO:1566: (Length of Sequence = 305 Nucleotides)

360

GCACTGTGGC TAATTGTAGC TCAAAAGATC TGCAGAGCTC CCAGGGCGGA CAGCAGCCTC GGGTGCAATC CTGGAGCCCC  
 CCAGTGAGGG GTATACCTCA NTTACCATGT GCCAAAGCAT TATACAACTA TGAAGGAAAA GAGCCTGGAG ACCTTAAATT  
 CAGCAAAGGT GACATCATCA TTTTNCGAAG ACAAGTGGAT GAAAATTGGT ACCATGGGGA AGTCAATGGA ATCCATGGCT  
 TTTTTCCTCA CCAACTTTGT GCAGATTATT AAACCGTTAC CTCAGCCCC ANCTCAGTGC AAAGC

SEQ ID NO:1567: (Length of Sequence = 292 Nucleotides)

GATTTCCTTG GGAAGACAA CATCACCAGC AAATGGATGA TTGTCAACTG GGGAGCCATT GACTCTCCAC TTGATTGTGG  
 GTTGAGGTTT TNCCTCAGCC TCACATAACA AGATGCCATT GCTTCGGTG CTATACACAG CACTCTGAGG CTTCTTTTGC  
 CAGCGAGGAG GCTCTTCTAC TATAACGTGA AAATCGTGAG TGGCTGTTCC CAAGAAATTG CTGGCTGTGC AGCGATAATT  
 TCCTTTGTCC TGGTAGGAGA CATNCTCTAT CTTCAAAGTC TTGCCATAAT TT

SEQ ID NO:1568: (Length of Sequence = 204 Nucleotides)

ACCTACTCAG GAGGCTGAGG CAGGAGAATA GCTTGAACCC AGGAAGCGGA GGTTGCAGTG AGCGAGGTC ATGCCACTGC  
 ACTCCAGCAT GGGCAATAGA GCGNGACTCT NTCCCCCGG AAAAAAGAA CAAGGGCTAA NTTCAAATCA AATTTTCCCT  
 GTACCCTAAG AANAATAATT AGNCGGGAG ATGTTTGACT AAGT

SEQ ID NO:1569: (Length of Sequence = 362 Nucleotides)

CACAAAGCCA AGTACAGAAC CACAGAATGA AGCCGTCACA AATGTTGAAT CCCAAACAC TAACAGGAAC AACTCGTATT  
 TCCATTAAATC AAGATTTTAG TATACCAAAT TTTCTAGTTT TTATCTCATG GAAATATAAG GGTATTTTAT CTTTGTATG  
 CTACTGAAGG GNAACATCA TCATACAGCA ATGAATACIT CAAGGNCIT GTTGATCTCT CTATTATTGA CAGTGGGGTG  
 TTAAAGTCTC CCACTATTAT TGTGTGGNG GCTACANCNC TTTGTAGGGC TCTAAGAAGG TGTTTTATGA ATCTGGGGGC  
 TCCTCTTTGG GNGCATATAT AATTAGGGT AGTTAGTTCT CC

SEQ ID NO:1570: (Length of Sequence = 262 Nucleotides)

TGCTAAATGA TAGANGACAG ATTCAAAGTT GTAGTTACTG CGTAACTTTA TTTATGAGGC ATTTTAGAAT AGGCAAACT  
 GATCINTTGT GGTAGAAGTA AGAAGTGGGG TACCCTCTGG AGGAAGAGAA TTINCTTTGA AGTGGCATGA GAGGATTTT  
 TTGGCTAATG AAATTATTTT NATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TINTCAAACCT CATGGNACCA  
 TTCATCCAAG TCCTGTGCAT TT

SEQ ID NO:1571: (Length of Sequence = 402 Nucleotides)

TGCTAAATGA TAGAAGACAG ATTCAAAGTT GTAGTTACTG CGTAACTTTA TTTATGAGGC ATTTTAGAAT AGGCAAACT  
 GATCTGTTGT GGTAGAAGTA AGAAGTGGGG TACCCNCTGG AGGAAGAGAA TTINCTTTGA AGTGGCATGA GAGGATTTGT  
 TTGGCTAATG AAATTATTTT TATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TGTCAAACCT CATGGAACCA  
 TTCATCCAAG TCCTGTGCAT TTTACTGTGT GAAAATTATA TCTCGACTTT TTTCAAAAAA GGAAAAATA CTTAATTATA  
 ATATAGCATT TATGNATTAA AATAATCCCN TTATGTAAAA ATATTTTATT GGNTTGGTCA AGATTCATGA TTGCAAACCA  
 CC

SEQ ID NO:1572: (Length of Sequence = 417 Nucleotides)

CTACCAGCCC GTTTTCACAA CTAGCAGCAA ATCCTGAAGC ATCCTTGGCC AACCGCAACA GCATGGTGAG CAGAGGCATG  
 ACAGGAAACA TAGGAGGACA GTTTGGCACT GGAATCAATC CTCAGATGCA GCAGAATGTN TTCCAGTATC CAGGAGCAGG  
 AATGGTTCCC CAAGGTGAGG CCAACTTTGC TCCATCTCTA AGCCCTGGGA GCTCCATGGT GCGATGCCA ATCCCTCCTC  
 CTCAGAGTTC TCTTCTCCAG CAACTCCAC CTGCCTCCGG GGTATCAGTC ACCAGACATG AAGGCCTGGC AGCAAGGAGC

361

GATAGGAAAC AACAAATGIGT TCAGTCAAGC TGTCAGAAC CAGNCCACGG CTGCACAGCC AGGNGTATAC AACAAACATGA  
GCATCACCGT TTTCCAT

SEQ ID NO:1573: (Length of Sequence = 368 Nucleotides)

CAAATAAGTT AGAAACATGA AAAATTCCTA GAACTTTAGA TGAAAAATTA AATTTACTAC TAATACCCAC CTGCAATAAT  
TTCCCGTAGT TTGGGATCTA GGTTCACAGT GCATGGCAAA AAGACTTTTA CATCTCGAGC CACAAGAACT GGGGTCCTTG  
AAGACAAAAA CACTTCAAAA TTTCTTATAT CTCCATCAAT TTCAAGAAGT GGCTCAACAT CCTTAGTGTG TGGAATATTC  
TTTGATATTC TTTCTAGAT GGTTCCTAAT GTCAATTTGAT CTGGAATACC TTCAGTCTCT TCCAAATATA ATATGAGNCA  
TGAAGTCCGG TATGGCCACT GCTCAGTAAG GTTGATCCCG CTAGCAAG

SEQ ID NO:1574: (Length of Sequence = 397 Nucleotides)

AATTTTAAGC AAATGTTATG TTTAAAGACT GTTTTGATGA AAACCTTTAG AATTGAGTTA GTAGCAGAAT ACATAGCTAA  
ATGTACTTTN CTACAAATAG AATGAGATAT TTGATTTAAA ATATTNCTTT CCTCTTGAAA TAGGATGTTA GATAGGGACA  
TCTCATTTTA CCTATCAAGT TCTGAGTCTT GCTTTAGAAC TACTTCTTTT AACTTAATIN CATGCATACA CTGGAAGACA  
ATAATATGGC TTTTAACTG CATTATCTTT AGTTGAAACT GATGGAGAAA CAAAATACT GCTTATACCA TATTGGGTAC  
ATGCTGAATG TTTTAAAGA CTAGCCAAAA CTGACATTTT TAAAATTAATA ATAAGATGTT TTAGTTTCAA ATTAGAG

SEQ ID NO:1575: (Length of Sequence = 296 Nucleotides)

GGACTCAGCC TTCCGCGGCA TCTGCATGAT GATCGGTGTC AACCCGGGGG GCGTTGTGCA GGTGGGGCA GCTGGGCTCT  
NAGGGCAGGC GCGGGCNCITG GGCTCGGGCG GCCCCTCACC TGCGATCCGT CACGTTTCAG GACTTTATTT TCTCTTCAA  
TGNIGTAGCC TCCTGGGIGA GCCCGAAGAT NACCTCGGG ACATGTTTTA TAAGGTGAGG CTCGTCTGCG GCCCTGATCT  
AGTTCCGGGA GCAGGCAGGA NGTGAGACCA TCTGGTAACA ATNGGGGCTN GGGATT

SEQ ID NO:1576: (Length of Sequence = 289 Nucleotides)

CTTTATGAAG TAGTAATTCC TGAGAGGTGT GCTGGCTGAA AACATAATAG GTTCTGGAAG AGCCAGGTAA ATGCCTGGNT  
TTAGACATGC AGGGGTTAAT CAAAATAATT TAGGAGCGTT TTCAGCTGGT GAGCCTCATA TGGGATCTTC GAACCCGTGG  
CGAGAAGAAA ACCGGTGTIT AGGNAGCACC AGGCACAGTG CTCGGAAGGG AGAGGCTNGC CGGCCAGTGT GCAGCTCAGC  
TNTTTCGAGG ACGBAACCCG CAGCCTNGCT GTNTCCACG AGACCCAGG

SEQ ID NO:1577: (Length of Sequence = 320 Nucleotides)

CAGACTCTAC TCAGATTTCC CGCCTATGCC CCTAGGACAG AGCTGGAAGG GAAGGAGGCT GGGCCTATTT AGTCATAATG  
CCTCCCCACC AGGTCTAGCT TTCATTCAAT CATGAACCTT CACCAAGGG CCAAGAAGTG AGTTCAGTGC ACCCTGGACC  
CCTGTTGAGG TAGGAGAAGT AGACGTTGGG AGCAAGGTTT CTCTCTAAT TTNTTGCAT CCCCTCAGTG CCCAGCACAG  
CTCCGGATAC AGGGCAGGTT CACAGTCAGC GTGTTACCTT GGGNCTGTGT ATGCACCTAA GGAAAAGNCT CAATTTTCCT

SEQ ID NO:1578: (Length of Sequence = 217 Nucleotides)

AATCAGGAGA ACTGTTAGAG CCATACCAGA GAAATCACA AGAAAGGCAG GACTGCAAAG NTCTAGTGGA GGCTGTGAGA  
AAAGGTAAAC CCCITCTTAA GCTCATCTGC CCCITTAGIT ACCACTGGCT GTCTCACTCC TGGATTATG TGACTCCCTT  
AGCTATACTT TCCANCCCC CTGGGATGTT CCCCACTCAT CCTATTCAT CACAAAG

SEQ ID NO:1579: (Length of Sequence = 375 Nucleotides)

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TTGGTCCTCA AGTCCTATTT TAAAATTTTG TCAATTAGAG GACTCTTGGT TCTCTTGGTT GACTCATTCT CTGCTGATTT  
 GTTCTCTGTA CTTGCAGCAA ATAAAGTGCA GTCATTGAGA ATGNCCTGT GTCAGTGGA TGTATCAAGG GATCTTCATG  
 TTAATATCTG TTTCTCTGAC AACTGTGTTT TATACTTTGT ACTGTAGCTT TCATTGGAGA AGCCCTGGGC TCATAAGAGT  
 GATTTGTTGT GGCATTTCTT TATGGAACAT AAGCTTTTGA AATATACTTG AGGTAAATAT TCATGGGAGA CATCCAAATG  
 CAGTAATGAG AGTACAATGA AGACAGCATT TTAGACTTTG GAAACCTGAG TTCAA

SEQ ID NO:1580: (Length of Sequence = 325 Nucleotides)

TCINCTGATG CACCCATGAG AGGGGAGACA GCACTGTGCT CTCTGCGAGT TTTCCCTTAA CACTCCCTTA TCTGCAGACT  
 TAAACTAGGA GCCCCTGGCA GAGTCCTACC TCCAGAAATCA CAAAAGTGTA GAAGGAAAGT GAGAGACATT GATTGACTTT  
 ATATCTGACT TACTAGTTTC CTAAGGCAGA GATTTTTTAG AAAACTGCCT GGCCTGGCCC AGCCCAGGAT AGATAGGGAT  
 GGGTAAGAAG CCCTTINAGAA TGTGGCAGTA TGTGGCTTNG ACTTCAGACT TGTCAGATTA GGGGTTTTAT AGGGGTTTTT  
 TTAGC

SEQ ID NO:1581: (Length of Sequence = 402 Nucleotides)

GCAGATCAAG AAAAAGTTTC AGCCAATGAA CAAGATCGAG AGGAGCATAC TACATGATGT GGTGGAAGTG GCTGGCCTGA  
 CATCCTTCTC CTTTGGGGAA GATGATGACT GTCGCTATGT CATGNTCTTC AAAAAGGAGT TTGCACCTC AGATGAAGAG  
 CTAGACTCTT ACCGTCGTGG AGAGGAATGG GACCCCAAGA AGGCTGAGGA GAAGCGGAAG TTGAAAGGAG CTGGCCCAAGA  
 GGCAAGAGGA GGAGGCAGCC CAGCAGGGGC CTGTGTTGGT GAGCCCTGCC AGCGACTACA AGGACAAGTN CAGCCACCTC  
 ATCGGCAAGG GAGCAGCCAA AGACGGAGNC CACATTCTAC AAGGCCAATA AAGACCTACG GCTTTTTTCC CNTGGCCAAT  
 AA

SEQ ID NO:1582: (Length of Sequence = 286 Nucleotides)

TCTTAGTTGA TTAACAACAA TAATTGAAAT AAAAAATTAT GTTTATNCTT ACATGTATGC CATGTAGCAC TTTAAGGAGA  
 TGAGTTTATG AAATTCATGA ATGAGAGGAT GATGTAAGTT TAAAAATCAT TATTTTAGTT GCTTTATTCT NCTATTTTAA  
 ATTCAATAAT AACACAGGTG GCCTGTATTT TGAAAAGAGC CCTTTCCTCC ATTTGANCTT TATAAAGACT GAGGCAGTAG  
 GTGTAAATA TTATCTCCAC TTTATATTTG AAGGAAATGG GGGCCA

SEQ ID NO:1583: (Length of Sequence = 323 Nucleotides)

CIAATTTTTG TATTTTATG AGAGATGGGG TTTCACCATG TTGGCCAGAC TGGTCTCAA CTCTGACCT CAGGTGATCC  
 GCCTGCCCTG GCCTCCAAA GTGCCAGNT TATAGGCATG AGCCACCAG CCTGGCCTTC CAGTTGTGAC CTTGTTAGGA  
 TACTGCTTTA ATTCATTTTC CCATTGAAA TAAGCATGAA AATAACTGTG CAGTCATAAT TGTGGTATTT NCTGTNAAGG  
 AAAGTGGCAG GGCTCTGAGT GTTATCGGG AGACCTAACC CAGTNCAGA GGGGAAGTCA GAAGGCTTAC TNCCCAATGG  
 GGG

SEQ ID NO:1584: (Length of Sequence = 301 Nucleotides)

AAATACTTGT AAATCACTTT ATGTTTCTGA GTAAGGAAGT AATGAAACAT ACGTACAAGT AATCAGTAAG ACTTGTTAGA  
 CAGCTGTTGT TCAGGATGCC TTTAAAAGGG CTGGTAATGC AGTTACATTC TAACAGAGAA GTCCAAACTA CAGGTAAGAA  
 CTACGGCTTG TACTGTGAAA AATGTGCAGC TTTTCAGTTA TAAACTAGT TGAACACTGG TTTACAAGGT AATCCGTAGG  
 AACAGAGAGA CTGTAGGAAA ATATTCCAGC ACTTTGAGTT GTGTTTTGGC AGCAGCATTT G

SEQ ID NO:1585: (Length of Sequence = 328 Nucleotides)



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AAATACTGAT TTCAGACCTT CTTGCTCTAG AAGTCAAAAT ACTTTCCCCC TGACAAGAGG TAAGATAAGG TAGAAAATAG  
 AAACACTGGA AGAGAGATCT GGA CTCTTAA AGCTGTGATG CCATAGTGTA GTGGGGGGGG GTGCGTGAGG AAGTCAGGAA  
 TGCCGCAATG TTAAAGGGAA AGGGAAGATG GAGCAAAGTG AGTCCCAGGG CCAGCAGGGG GCCAGCCTTN TTTGACAGGG  
 GCAGGGGAGA AAAGGCCAGA CTTCCCATAC ACATGCTAGA GGGGAGGGCT AGTGTTGAAG GGTAAATAAGT TGAAGGAGTC  
 CACGGGCT

SEQ ID NO:1586: (Length of Sequence = 256 Nucleotides)

GGACTATCTG TATGGCAGAC TCATCAACTT TGAGAAGAGG AGGAAGGAGT TCGAGGTGAT CGCCCAGATC AAGCTGCTGC  
 AGTCGGCCTG CAACAACCTAC AGCATTGCGC CAGATGAGCA ATTGCGGGCC TGGTTCGGG CCGTGGAGCG CTCAGCGAGA  
 CTNAGAGCTA CAACCTGTCG TGGAGCTGG AGCCCCCATC CGAGTCAGCC AGCAACACCC TCAGGACCAA GAAGAACACA  
 GCCATINTCA AGCGCT

SEQ ID NO:1587: (Length of Sequence = 371 Nucleotides)

GGATTCTACA GGCATAGACT TACACGAGTT TCTGATTAAC ACATTAAAGA ATAATTCCAG GGACAGGATG ATACTTTTGA  
 AAATGGAGCA GGAAATTATT GATTTCATTG CTGACAACAA TAATCATTAT AAAAAGTTCC CTCAGATGTC ATCGTATCAG  
 AGGATGCTTG TCCATCGAGT GGCAGCTTAT TTTGGATTGG TTCACAATGT GGATCAACA GGNAAATCTG TTATCATCAA  
 CAAGNCCAGC AGCACCAGAA TTTTACCAGC CAGTCTTGTC TNGTCAACAG GGGNTTCCAA GGGCTAATAG GAGTNCAGCA  
 GCCCACCTCA GAGTCAGACG TGGTTAAATN ACCCCCAAGG GACTTCGGTG C

SEQ ID NO:1588: (Length of Sequence = 314 Nucleotides)

CACACAGGAT TCCATAATAC TCCTGCTGTG TTCTGAATAT TTGTACTTCA CATGGGATTA CTGAACACTA CTACGAGATT  
 CTGAATGTTT GINGCTCACA TAGGATTCCA AAATGCCCCCT GCTGTGTTCT GTTTGTCCCT CACATAGGGT CACTGCTGCT  
 GGGTTCTCAG TGTTTCTCAC TCACATAGAA TTCCAGNACA CTGCGAAGAA TTTCTGAATG GTTTTCTGTA ACATAGTATT  
 CCAGCACACT CTCGCTGTTG TTTGAATGTT TGTCCTCAC ATAGGATTCC AGAACACTTC TGCTGATGTC TTGA

SEQ ID NO:1589: (Length of Sequence = 256 Nucleotides)

GACGAGGCAC CATGCTGAG ATCGTGCACA TCCAGGNGGG CCANINCGGC AACCAGATCG GNGCCAAGTT TTGGGAGGTC  
 ATCAGTGATG AGCATGGGAT TGACCCCACT GGCAGTTACC ATGGAGACAG TGATTGTGAG CTNGAGAGAN TCAATGTTTA  
 CTACAATGAA GCCACTGGTA ACAAATATGT TCCTCGGGCC ATCCTGTGG ATCTGGAGCC AGGCACGATG GATTCTGTTA  
 GGTCTINGACC ATTCGG

SEQ ID NO:1590: (Length of Sequence = 313 Nucleotides)

GGCAACAAGC CAAGTAGCAA AGATATAAGC AACATCAAA TGGAGCCTGA AATATGATAA GAGCATACAT GCACTTTAAC  
 AATAATTTTG ATACTGGAAT GATTATTTCA GAAGCAATAT TTTINCTGAA AAGCATTGGT CTTCTGTACA GAAAAATAAA  
 AAAGTGAGCT GCCACTCATA GTGAATTAAG AGCTGTGGGC TGAAAGGGTC TCITTTATAG CCAGTTTGAA ATTTTTCATA  
 TAATAAAAAC AGTATGTAAA TATTATATAT ATATACACAC ATACATATAT ATGCATATAT GTACATATTT CTG

SEQ ID NO:1591: (Length of Sequence = 296 Nucleotides)

TTTINAGTCTC CGGCCTCACA ATTGAGCGAC TGCGCTCGG CCAAGGCCAG GGGAGACCTG GGTGCCTTCA GCAAAGGTCA  
 GATGAGAAG CCATTTGAAG ACCCTTGGTT TGCGCGCGG ACGGGGGAGA TGAGCGGGAC AGTGTTTACG GATTCCGGCA  
 TCCAGTTCAT TGTCCGCAAG GAGTAGGATT NGGGCCCCAG GCCTGGCCTC GGGGTTCCCC CGCTGCCTGC TGGCCAGTGG  
 CNGAACCCCC CANTNCTGTC CACTNCTCACA CAGTATTTAT TGTTACCAA ATGGCT

SEQ ID NO:1592: (Length of Sequence = 299 Nucleotides)

GGAATTCCTCA AATTATGGGT AGTCCAAAAG CCAAAGGCAA TGTGAGGAAG GACACTCCCC AGATAAGAAC AAAACAGAA  
 ATCTGTATGT NCTATGTGTT ACACACAGTT GCGAATAATC AGATGTACAC ACATGATGCA AAGGCACGCC GCTACACATT  
 TATGTGATAT TCAGACATAT GTTCAAATAG AGGAGGTGAA TATCTTTTAA TAAATACAAT TTAGCAAGTA CAAGAATGCT  
 GATCAGCTGC AGCTCAAGAG GAAAGGGGGG AAAAAATCTT ATGGGAAATT ATTAATACT

SEQ ID NO:1593: (Length of Sequence = 378 Nucleotides)

CCAGTTTGGT GATTCTINTC TGTGCTGCT GATCTATTGG CGTGAGAAGC TGAAAGTGAC CAGCCAACAG CCATAACTTT  
 ATGTTTAGTG AGACTCATAA TGGGTCTCCT GCTGGAAGAT CTCCCTCTA AGANTCAGTA ATTCTAGACC TGCAAAGTTT  
 GAAGTTGTAA GCATGGGAAA CACAAATTC CCAAATAGGT CCAGATAGTG ATAGAGAATA AGACACTTAC TTGCCTACTT  
 CCATTTCTCA GCCCAGATAT TCTACCTATA GTGGACATGC CCATGCAATG GGCTATTGGG TTGAGGTAT ACATTGCACG  
 GTTGAAGGAC AGTGCCTCAT CCTTGCAGGG GTGCCCTTIN CCAGTTGGCA CCACAGCT

SEQ ID NO:1594: (Length of Sequence = 353 Nucleotides)

ATTTTTCGG GGGAGGTGTA TGTAGATGAG AGTCTATGAT ATAAAGCAGT AAAAAAATG CTGTTGTATA GGGATGCAAT  
 ATTTTCGGTG TAAGGAAGAG GTTTTAATTC ATAAATAGA AAACAGGTTG GAGAAGTCTT TAGGAAAGGG ATACCTTTTG  
 GGTGGCTTTT TGAAGGAGAA GTTTATACCC AGGTTCAAGC TGAAGGGCTA AGTGAGTAAC TGAAAGGGCT GAGCTATTTG  
 GATTACCATG AGGAATTTGT GATGGCTGGG AATGTAGGGT GTGTGACCAG ATGTGGAATC ACAGAGGGAG CCCACAGAGG  
 AGCTTCGGCA CATAANCTAA AGAGTTTAAT TTT

SEQ ID NO:1595: (Length of Sequence = 343 Nucleotides)

CAATATATTA AATCTATTTT GTAGCTGGAC TTCACCTACA ATGTAACAGA ACATTGAATA TTAGATTCTG AGCATATTCA  
 TGCAAACCTC CACTTTGGTG AAAGTGATGA CAGTGGAGTT CTGGAAGACA ATTTTCCTTG TAAACACCAA GTTTTGCACT  
 TTGGACTATG CTCTCAAGAT AGAACTTAC GTGAGTGGAA AAAGAAAATG TATAAATGTG AACAAATATT CCTTACCACA  
 CAGAATAACC CTGGCAACAA ACAATATCCC CAAGTCCTGG GINATTCAAT CCTCACCGTG GGCAGGAAGG GTGAAGGAGG  
 CTGCACCTGG GNCACAGCCT TTT

SEQ ID NO:1596: (Length of Sequence = 373 Nucleotides)

TAGTCAGTTA TTGCTGCACT AGAGCTAAAT AAAAGACATA AATATCTAAG GCACCTACTG GAATAACAT CTATTTCCG  
 CTAAGAGGTT GGCTAGGGAA GCTCTGCTTC AGAGTATGGG TTGAGTATAA GCCTGTCNCCA CATGTCTTTT GCTCTGGGAC  
 CAGGAGTTGT GCAGCCCATC CTTTCTCAA GACAAAAGCT GAGCCAAGCA AGGACATTTA AAGCTTCACT TCTGCTCACA  
 TCATATCTAT TGGNCAACA TTCCATTGGG CCAAAGCAA TCACATGGGC CAAGTCAAGC ATCAGTAGGT CTGGGGGAAT  
 ATTCTTTCTT CTACTCTTGG ACACATGGGA AAGGGTTATG CATACTAATT CTT

SEQ ID NO:1597: (Length of Sequence = 276 Nucleotides)

GATTGTCCAT ACTTGATAT TAGTTCTAA AGAAAGTATT CTTAATCCA AGCCTAATAG CTCCTATGTC ATTAGTTTCT  
 AGTGCAGAGA AATGTACTTG ATGAATTTT GTTGACTTTT TTTTGTGCTA GCCAATATGA AGGTGACCAG TCCCTGCCAA  
 AATCAGCACT AAACTATTT TNCATGAGTA ATAACAATA TATTCTTTT TAAATAGCAC CTTTAACCCA AAAATCTTAA  
 GCCTATATAA ACATTCACTC AACANTACAC TCAAAA

SEQ ID NO:1598: (Length of Sequence = 355 Nucleotides)

365

TGTATTGCTA ACTGTCTTTG TAACTAATTT ATGTATACNC TAAATGGTAT AGCATGTGAT TTTATTATAG TTGATTAACT  
 TTGTAATTNC TGTAAC TGCA TCGATATCCC AGTCTACCTG GAAAATTAAG TCTATTAACC ATAGTTGCTG TGGGAGACAG  
 TACTATTGCC AACTGAAGCC TGAATCCTTC ATTTATTTTG TCCCCAGTTA CAGAGTGGAG GTTTAGAGGA GTGGGGTTAG  
 ATAATGCTCA GATTAGAAAT ACAAAGGCAG CTGTCAGATC CTCCCATTIT ATTTGTTTGA AGGAACTGAG GTTGGTAAAC  
 ATCACAAGNG CTAGTTAACT GGTGAGTAGC AGCCC

SEQ ID NO:1599: (Length of Sequence = 313 Nucleotides)

GGAGGTGAAG GACACAGTGG ATGGGCAGAG GNTCCTGGAG AAGAAGGGCA GTNCTGCNCT CAAGGACCTC AAGCGGCANT  
 GCATTTCGAG CGGAAACGGG CAGATAAGCT GCAGGAGCGA CTNCAGGACA TCCTCACTAA CAGCAAGAGC CGCTCAGGCC  
 TTNAGGAGCT GGTTCCTCTCA GAGATGAACT CACCAAGCCG GACCCAGACA GGGGACAGCA GTAGCATCTC CTCCTTCAGC  
 TACCGGGAGA TCTTTCGGGA AAAGGAGGAG CTTGCGCTTG TTCCAGCCAG GTCCCTTATCC AGCAGNCCTIN AAG

SEQ ID NO:1600: (Length of Sequence = 277 Nucleotides)

AGTTCACAGA ACTCCAATTC TTTATTATC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGAGTAAA  
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGACTTCA AAATGCGAT AGGTACTTAT GGTGGGTATC  
 TGGTGATCT TAGTTGGCAC AAATGCCCTG CCTAGCCCC TTAAGTGGT CANTTTACA GATGGAGTGT TTTGTTGTTG  
 GTGTTGTTAG TAGGCAGAT TGCTTACAC TGGGGGA

SEQ ID NO:1601: (Length of Sequence = 228 Nucleotides)

TTGAGACCAT CCAGGCTAAC ACGGTGAAAC CCCGTCTCTA CTAAAAATCC AAAAAAAAAA AAAAAAATT AGCCGGGCGT  
 GGTGGCTTGC GCCTGAAGTC CCAGCCACTA AGGAGGCTGA GGCAGGAGAA TGGCATGAAC CTGGGAGGCG GAGTTGCAGT  
 GAGCCGAGAT CGCGCCACTG CACTCCAGCC TCGGCGACAA AGCAAGACTC TGTCTCAAAA AAAAAAA

SEQ ID NO:1602: (Length of Sequence = 299 Nucleotides)

GGAAGTCCTT TCTAATGAAG AGGGGAGATG TTATOGATTA TNCATCATCA GGGGTTTCCA CCAACGATGC TTCCCCCTG  
 GTTCCTATCA CTGAAGAAGA TGAAAAATCA GATCAGTCAG GCAGTAAGCT TCTCCAGGC AAGAAATCTT CCGAAAGGTC  
 AAGCCTCTTC CAGACAGATT TGAAGCTTAA GGGAGTGGG CTGCGCTATC AAAAATCCC AAGTGACGAG GATGAATCTG  
 GCACAGAAGA ATCAGATAAC ACTCCACTGC TCAAAGGATG ACAAAGACAG NAAAGCCGA

SEQ ID NO:1603: (Length of Sequence = 263 Nucleotides)

AAGGCAAGAA ATTAGCCTTG TTAAGAATTT TAAGTGTAAT GGAAGCCAT TAGAGGGTTT TAAACAAGGA AAGATGTGAT  
 GTGACTTATA TTCTAATAGG ATTGCCTTGA TTCACCTATG GAGAATGGAT TNNTGGGATC TCAGTACTGG GATACTGAGA  
 TCCCAGGGGG AAAATATCAC TAAGTTTGA ATTGCTTTTC TGCACATTAA AAGCAATTCN CTTTTTCCTT GAAACCTCCA  
 TGTGATGTTA ATTAGGGTAA ATG

SEQ ID NO:1604: (Length of Sequence = 260 Nucleotides)

ATGAAGACGT ACGACTTATT TTTGTTTCT GAACATAAGT NCTTTGTAC ATAAATGTG CTATGAATGT TGAGTTTTAA  
 ATACTCGAGC GGTGACTCAC GCCTGTAATC CCAGCACTTC GGGAGGCCAA GCGGGCGGT TCACCTGAGG TCAGGAGTTC  
 GAAACCAGTC TGGCAAACAT GGTGAAAACC CGTCTCTAC TAAAAATACA AAAGTAGCGG GGTGTCGTGG CGTATGCTGG  
 TAATCCTAGG GTTCCTGTCA

SEQ ID NO:1605: (Length of Sequence = 290 Nucleotides)

366

GACAGACATT CAAACCATGG CAGGTGGCAA GAAGTATCAA ACTACTAGAT CCTTGGGATT GINCTTTGTA CTGGGGTGTA  
TTTTINCCAA CAATCCTAAA AATCATATGA ATAGAGATAG CAATATATAT CTNACCCATT TGGAAATGCA CAGAGATTCA  
GGAGTGTTCA CATAGAAACA GAAGATCATT GGCTTTTGTG CATTCCCAAC GCCAGNAATC TGTTTTCCTT GACTCTTTTT  
GATCTGTGTT TCTGAATGTA TTGATATACT GCGCCTACTG GGTGTGCAGG

SEQ ID NO:1606: (Length of Sequence = 290 Nucleotides)

CTCACTTGGG TACTACAGTG TGAAGCTGA GTGCATATGG TATATTINAT TCATTTTTGT AAAGCGTTCT GTTTTGTGT  
TACTAATTGG GATGTCATAG TACTTGGCTG CCGGGTTTGT TTGTTTTTGG GGAAATTTTG AAAAGTGGAG TTGATATTAA  
AAATAAATGT GTATGTGTGT ACATATATAT ACACACACAT ACACATATAT TATGCATGTG GTGAAAAGAA TTGGCTAGAT  
AGGGGATTTT CCTGAACACT GCAAAAATAG AACGTAGCAA AATGGCTTCA

SEQ ID NO:1607: (Length of Sequence = 365 Nucleotides)

GCTCCACTGA CCAGCTGTTT CCGTCTCTC CTCTCTCTG AGCCTCCCTC TTCCCTGAGA CACAATAATA TTAAATTTG  
GCCAATCAAT AACTCAACAA TGGTGTCTAA TAATTGTTCA GGTGCGAGGA AGAGGCATAC ATCTCTCACT TTAAATCAAA  
AGCTAGAAAT GATTAAGCTT AGTGAGGAAG GCATGTCAAA AGCCGAGACA GACCAAAAGC TAGGCCTTTT GTGCCAGTTA  
GCTAAGATGT GACTATAAAG AAAAGCTGTC GAGGGAAAT TAGAATGGTA CTCCAGGGGA ACACACAATG ATAAGGAAGC  
AAACAGCCTT ACTACTNGGA TATGGGGAAA AGTTTTTCAGC TTTGG

SEQ ID NO:1608: (Length of Sequence = 294 Nucleotides)

CTCAGGAAGC CTCTCTTCT TCACCTACCA TTACTAATCT TCCAAGCATA GAAATCCCTG GGAATTGCGA GAATAACTCC  
CACTATTTTA AAATTATAT TCAGATTTGT TTGTTTTCAT AAGACACATC AAACAGGCCT ATACAAAAGG TTTAGGAAAA  
GAAAACAATG GTGAGTCCCG GCCCTCTTCG AATTCATGCG CACCTCATGC AAGTNTAGGA AGGCACGCTG GATCGTCTAT  
CTGATTCCAA AGCTGTCTT TGCCATCTCA TCCCTTGNC TGCCCCCAA CCCT

SEQ ID NO:1609: (Length of Sequence = 393 Nucleotides)

CAAAAGCTAA CTCTTAATA GAAGATGAGG AAATAAAATC AGTTCAAAAG GGAGGAATAT GCATTCCAG AATTAAAGGA  
CCCCGGGTCC AGTTTGAGGA GGACTCTTG CCAGATACAA GCCCCTTGTA TAATNCTCAA GAGGGAGGAG ACCTTATTIN  
CTCCTINGAG GTGTCTAGTA TGAAANTGTC TTATTTTGAA ATGTGATTCT AGCCATTATC AGGNGCAACT GCAGATAATT  
CCCATTTACA GAGGAATGCT GCTAACAGGT GTGGNGGGA GCAGCGACAN CGNAAAATC TGCTGTGATA GGTCACGTTT  
ATGTTGGTTT TCTTTGAAAA TCAAGGGGTA GAAAATTTCA TGCCTCTAGA GGAGAGAGAG GAAACACATG AGG

SEQ ID NO:1610: (Length of Sequence = 464 Nucleotides)

TGCTGTATT TATTAAATG CCTTTACTAC TTTTAGATGG CCATACGTTT TCAAAAGCAA AGACCTAGTA AGCCATTGT  
GTTCATTGTC TAAGCTATCT TAGGTACAGG TCCAGATTAT AAATGTTACC TGCTAATCAG AGAGCAAATT TTTAAATTAA  
TCACTTGTA ATCCACATTA AAAGAAAAAG AAACCTAGAA AAACACATAA ATTTCTTTTG TGATCCCACT ATTCAGGAAA  
ATCCATTGAA AAAGCAGATG ACTTATCCGT GTTAAATTTT TAAAGNCCCT ATTTAAACTG TCATGTAAAT TCTNATTTAT  
CTAATTTTTT AAAACACATA TAGNNTTTTA CTCTCCAGTT CCATAANTGN CTCANITCTG GTGANGGTCA TTACAACAGN  
CATTACNGG GCATATCGGN NTAAANGGC CNTGCGGTCC TGNATCNGAG GNGGGGTTAA GGTC

SEQ ID NO:1611: (Length of Sequence = 465 Nucleotides)

ATAATTTAAA GAAAAGAGAA TTCTACAATG TAAACCCTT TAATATAAGC TGTTTTAATA ATTGGAAAAC AGAATGANTA  
NIGTTTTINT TTGTCATGCC CAATTATTT ANCAAGTTTT TATTAATAAC TTGCTACATG GTAGGCACAG CTGTAGGTGT

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TGGAGATATA GAGGTAAACA AGTCTGACAT GATCTATGCT ACCACGGAGT TCTTATTTTC AAAGTGAAG GTAGAAAATA  
 AATAAAAATG ANCTAGAAGA GCAAAGTGCC TCTGAATGAG CATGCAGANG CATGTTTTCA AAATGCTGT GNGTGGGATA  
 AATAGATCAG CAACACACCA GGCCATGCAA TTINGCAGCA AATCACTTCT GCAGTCTAGC TGCTGTTTTT CCTACTCTGG  
 AATCATACTC CCCCTTCGG TCATCTNIGC CAGTTTCNCT GNGCTTCACC CTACCCTCCN TTTTN

SEQ ID NO:1612: (Length of Sequence = 458 Nucleotides)

ATGAAATGA ACAACCTAA AGAGAAATGT TCTTACCGTT CCACAGGAAC CAGCTTCTTC CACTGGGCCA CTAGGTCCCT  
 GGCAAAGCTT CCAACATGCT CGTGTTCG CAAGCTATTT ACTGTTTTCC CAACCCAGT CTCCTAAAAT TTGACAAAGT  
 AATTGTTAGA GGGGTCTGGA ACTAGGCTAA CGTTTTCTA AAGAAATAAG GCTTCTACT TTGAGAACT CAACAAGCAA  
 TACTTCCTTC CTACAACATA CCTGCAAT CTTAACAATA AATTACTTTG TGCTATGNC CCAAATCTCT AATGACACAC  
 AGTAGCAAAG NGTACCAAGT TCAGAACITTT AATAACAGNG GINATTAGGG CAGGTGTTAG GGCCTAGNT AAGNGCTTTG  
 CATCAGTTCT GGATCAGNCT TTTAAATAAC CCCTTAAGNG GGGNTNAGNC CCTTTTTT

SEQ ID NO:1613: (Length of Sequence = 322 Nucleotides)

ATGTGGAGAT TTGTTGTGGG CTAGGGCAGT CCAGAGGAGA GATATGTGGC AGGACAAGTC TCTACCCTAT ACAAGTNCCT  
 CCGGCAAGCC CTCAGCATAT GACATAGGCC CAGAGAAGGA TGCAAAGAAT TCTGGTCATA AATTGTTTTT AAATATCAAA  
 TAAATCATAT GTGCACATGC ACAACATGC CTTCACTACT GAGTAAACC AGACTCACCT TCAAATATAT CAACAGTTTT  
 NTCAAGCGCC GTTAAAAATC AGGCATCGGA CCTCTGGNIN CGAGAGCTGG TTTNATGGGG AAGTTAGATC AACCCGTCAT  
 CT

SEQ ID NO:1614: (Length of Sequence = 280 Nucleotides)

AGTATCAAGG GATAAAATAT ATTITTAATT TTGTATTTCA CTTGAAAATT GTAAGGNCCA TTTTATAATG TATTGCTTGC  
 AAAATAAGTC ATGGAAGCCC TGAAAAATTA GTCAATTCAC TAATCAAAGA AACATATATT AAAGACCTAC TATGCATGAG  
 GCACCATGCT AATTGCTTTG AAGAAGACAA AGTTGAATTA GACAGGNTC CCGTTTACAA GNTATTTTACA ATGCAAAGGG  
 GGATACAAGA CATATAAAG GCTATGGAAC TGCCCTTCGG

SEQ ID NO:1615: (Length of Sequence = 393 Nucleotides)

GCGTGGTGGT GCGTGCTGT AAATCCCAGC TACTACGGAG TCTGAGGCAG GAAAATCCCT TGAACCAGGG AGTCGGAGGT  
 TGCAGTGAGC CGAGAGCAG CCACTNCACT CCGCCTAGC GACAGANTGA GACTCCGTCT CAAAACAAA CAAAACAAA  
 CAAAAACCA AAAACACTGG GAGTCCCAGT TTGTAGGAAA TCATTAGAT TTTATTTATTT GAGCTCCAGA ACGAGTGAGG  
 ATGACCTGAT AATTTTGGTT TGGCTCAGGT TGTAAATGTT TCTGTTTTG CTCGATGACT ACTAGAACAG TTCTCAAACT  
 GTGTGGTGGG TAAGAATCAC CTGGGACTT TGACCAAGTN ACATGTCTAC AACACCGGC CCCTACAGGC TCT

SEQ ID NO:1616: (Length of Sequence = 353 Nucleotides)

CCACCCAGC CTCCTTGAG CTATCCCTTT CTATCCCCCT CCATCCAGCC CCTGGCCACC ACCATTATAT CTATCTGGA  
 ATTCCACAG GAAAAGCAGG CACTTTATAA ATCAGCGAGG GATTACGGC GAAATGAGAC TGTTCTGAG TNATGGCGIN  
 CCGGTTGCT TGCCGGTGT GGCOCGCGNC GGGAGAGCCC GGGCAGAGC AGAGGTGCTC ATCAGCACTG TAGGCCCGGA  
 AGATTGTINTG GTNCCGTTC TGACCGGNC TAAGTCCCT GTCTGCAGC TGGATAGCG CANCTANTIN TTCTCCACTA  
 GTGCAATCTG CCGATATTT TTTTTGTTA TCT

SEQ ID NO:1617: (Length of Sequence = 227 Nucleotides)

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TTTCTTCCAT GCAACANICT GNAGACTTAA GTGGCTTTCT NCTGTACTNC CATAGAACCC ACCCAGTACA TACCTCCAGT  
 GNNGCACTGA TTTTATGCTA TACATATGAC TGTGTGTTCA TCTCCTCCAC CAGACTGTGA GTCCCATTTG AGTAGGAACT  
 AAATTTTNTT CAACACTCTG TCTTCATCAC CTCGTGTAGT ATCTTGTTACA GAGTAGATAA TGATTAA

SEQ ID NO:1618: (Length of Sequence = 362 Nucleotides)

GGAAGGTTTT TAATGCATGA NGTATACTTG TNATCCTGGA GGTGGAAAA GATTTCAGTAA AGATAAAGTT TGGCAAAAAT  
 GATTCTCTCC CTAGGATTTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT  
 CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC TATGACTTTG GACTTGGCCA  
 TGCAACTTGC TTTGGCCAAT ACAATGTGAG TTAATGTGCT TTAAGTGCAT GTAATTAGGT CAGTCCCTCC CTCCTTGAGC  
 TTCAACTCTC CACCATGAGG ACAACATTGC CCTCCTTCCT GG

SEQ ID NO:1619: (Length of Sequence = 344 Nucleotides)

GCAACCTCAT CCCAGGTTCA AGTATCTCTC CTGCCTCANC CTCCTGAGTA GCTGGGATTA CTGGGCGACC ACCACACCCG  
 GCTAATTTTG TATTTTTAGT AGAGACAGGG TTTCGCCATG TTGGCCAGGC TGGTCTTGAA CTCCTGACCT CAGGTGATCC  
 ACCCACCTCA GCCTTCCAAA GTGCTGGGAT TCAGGCGATG AGCTACTGIN TCGGCCCAA TCTTTCTTAA GTGTGTCTG  
 GCCTTTGGCA GAAATAGCCA CAAAGNCAGG GTAGGAACGT TTTACTCTTC AAGTGATGAT GGCATCCGAT AANCTTTTAG  
 AGGGAGGTTT TTAATGCA ACGT

SEQ ID NO:1620: (Length of Sequence = 379 Nucleotides)

GCCAGCCGAA GCTCCTCAGG CTCCCACCT CTACAAGCTC CTCTGCTCC AGCCCACTC ACCAGGCCCG AGTCCCACC  
 TAGCACCTTC CCTGGGAATN ATCTCCCCCT GGTGGCTCT TCTACTTAT TCAGCCTCA ATGTATCTC CACTGANAGG  
 CCTTCTCTGA CCTGCTGAGC TTGATTCCT CCCCTCCCA GTNACATTAC TCCGTGTAT GGTACCCATC CCTGTCTCT  
 TAGCTTGTTT TTGTCTGTAT TGGCTCTTCC ACTAGACTGT AAGCTGCATG AGGGCAGGG ATGTCTGTTT AATNCCAGTT  
 GCTCAGGATA GTGTATGGCT CGTGATAGAT GCCTAGNACA TTTTAAATG GGGACGGAT

SEQ ID NO:1621: (Length of Sequence = 283 Nucleotides)

GATTTGGGGG CTCGGGGAGG CAGAGAATCT CTTGGGAGTC TTGGGTGGCG CTGGTGCAAT CTGTTTCTC TTGATCTCAA  
 AGGACAATGT GGATTNNGG ACCAAAGTTC AGGGACACAT CCCCTTAGAG GACCTGAGTT TNGGAGAGTG GTGAGTGGA  
 GGGAGGAGCA GCAAGAAGCA GCCTGTTTTC ACTCAGCTTA ATTCTCCTTC CCAGATAAGG CAAGCCAGTC ATGGAATCTT  
 GCTGCAGGAC CTCCCTCTAC TACTTCTGT CCTAAAAATA GGG

SEQ ID NO:1622: (Length of Sequence = 356 Nucleotides)

TTAATTTTAA AGCAGATAAT ATTTCAAATA TTTTCTTTGA AATAGACCAT TTGTCCTGCC TTGAAGTATG TTAGTACATT  
 TTAAGAAAGT CAGTGGGTTA AGGAGTCAGT GCTGTTAGTA TTCATGCTTA AAACACTTCC CTTCTACCTA CCCTAATAAA  
 TGAGGGGCTC AAGAGAAATA TTTCTAATTC TCTAGCGACA TGGCTAATTT TTTTTTTTAA TGTATTTTGT TATTTTGTAGT  
 ACAGATGGAG TTTCACCATG TTGGTCAGGC TGGTCTCAA CTCCTGAGCT CAAGTGATCT GCCTACCTCA GGCTCCTGAG  
 TCACTGAGAC TGATGTTGTG TGCCACCATG CCAGGT

SEQ ID NO:1623: (Length of Sequence = 361 Nucleotides)

TTTGAGACAG AGTCTCGCTC TTTCGCCAG GCTGGACTGC AGTGGCACTA TCTCAGCTCA CTGCAAGCTC CACCTCCCGG  
 GTTCACGCCA TTCTCCTGCC TCAGCCTCCC GAGTAGCTGG GACTACAGGC GCCCGCCACC ACGCCTGGNT AATTTTTTGT  
 ATTTTTAGTA GAGACGGGGT TTNACCATGT TAGCCAGGAT GGTCTCGATC TCCTGACCTC GTTGATCCGC CTGCCTCGGN

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CTCCCAAAGN GTTGGGATTA CAGNGTGAG CANCCGTGCC CAGCCGTNAA GTTAAGATAT TTTAAAAANA TCTCTGCAAG  
TTGAGGAAGT NTTTCAGGAC TCTTCTCTGC TTAGTCTCAC T

SEQ ID NO:1624: (Length of Sequence = 350 Nucleotides)

CTTTGTGAGC TTTTGTGACCT GCGGGATCCG AGCCAGATTG ACAACAATGA GCCCTACATG AAGATCCCTT GCAATGACTC  
TAAAATCACC AGTGTCTGTTT GGGGACCCCT GGGGGAGTGC ATCATCGCTG GCCATGAGAG TGGAGAGCTC AACCAGTATA  
GTGCCAAGTC TGGAGAGGTG TTGGTGAATG TTAAGGAGCA CTCCCGGCAG ATCAACGACA TCCAGTTATC CAGGGACATG  
ACCATGTTTN TGACCGCGTC CAAGGACAAC ACAGCCAAGC TTTTGTGACTC CACAACTCTT GAACATCAGA AGACTTTCCG  
GACAGAACGT CCTGTCAACT CAGCTGCCCT

SEQ ID NO:1625: (Length of Sequence = 333 Nucleotides)

GTCTTCTGTG AGACAAAGAA ATTATAAAGA TGGCAGAAAT TATTAGCGAC GTTCTACCTC TATAATTCAC GTTCCATGAA  
TCAGTACTTC ATTTCTTTTT TATGGATGAA TTAATATTCC ACTGTACAAA TATACCACAT CTGTGTTTTT CATTCGTCTA  
GGTTAAAAA TTTTATTTTT TATTTTATT TTTTGTAGA GACGGGATCT CACTGTGTG CCCAGGCTGG TCTTGACCTC  
CTGGGCTCAA GTGATCCTCC CACCGTGGCA GTCCAAAGTG GGTAAACTGT ACGCTGGTCT GAAAGACCTT GCTGAAGAGA  
GAAGAGGCAA GCT

SEQ ID NO:1626: (Length of Sequence = 314 Nucleotides)

GACTGTCCGT GGACACTGGT TTTTAAGCCC AAGAACTGAA TATACAGTAG CAGTGCAGAC TGCCCTCAAAA CAAGTTGATG  
GTGATTATGT TGTGTCTGAA TGGAGTGAAA TTATAGAATT CTGCACCGCA GACTATTCAA AAGTTCATCT AACACAATTG  
TTGGAGAAGG CTGAAGTGAT TNCAGGACGC ATGCTTAAGT TTTCTGTTTT TTATCGTAAT CAGCACAAAG NATATTTTGA  
CTATGTTCCG TAAGNTTCAA AAATATATAG TGATTGTTT TACTAAATAT AGTTTCAAAT TCTAGGCTCA GGGT

SEQ ID NO:1627: (Length of Sequence = 375 Nucleotides)

CCCTGGGCAC CTGGTACCTG GGGACCTACA AGGTGGTGAG GGAAGGGTAC GAGTACATTC CTINTCCCTC TGACCTGGGC  
GCTAGAAGGG CAAAGAACCC GAGCCTGCCA GCCTGGCCTC CTCCACAGC CTCCCTCGGA GGCATGCCAT GCCAAGCACT  
CTTCTGTCT CTGTTTCATGA ATAAAAGAGA TGGATGGGCT TATTCTTATA GAGAAGTGAA TTTCACITAC TCCCTGGCC  
CGAAACTAG ACCAAATGAG GAACGTGTTT AGCTCATCAA ACTGTTATAT TTATTTTCAA CAATGAAAAC AACACAACAA  
AGTGGAGTCA ATCCACTAAT TTTTAAAT CTAACACAAT TGTTGCACA ACAAT

SEQ ID NO:1628: (Length of Sequence = 434 Nucleotides)

TGCACAGGCA CACCTCCACT CTTTATATCA TTTTCTCCAT CTTTCATTTC CCATCTGTAC CTCCAAAATT TTGCTATGAA  
TCTAATTCAT CTTGCTCTC TCTCTCAT GGGTGCTTT GCTCTGCCA GTCTTTCTTC TCCTGCCCA CCCAACTTC  
ATGAATTAGT CTTTCTCCC AGGAGCTCTG ATTTCTAGAC TGCTTTGAAA ATGCTGTATT CATTTTGCTA ACTTAGTATT  
TGGGTACCT GCTCTTTGGC TGTTCTTTTT CTGGAGCCCT TCTCAGTCAA GTCTGCCGA TGTCTTTCTT TACCTACCCC  
TCAGTTTTC TTAACACGNG NACACAACCTC TGGAGAGTGT TAAGNATAAT GTTACTTGGT AATGTGTATT TATTGAGGAT  
TGTTGTGCTA AGAATGNGTA GGTAAATA GGGG

SEQ ID NO:1629: (Length of Sequence = 341 Nucleotides)

CCTCAAAGCT GCAGGGAGGT GGGGGTGGCC GGCAGACAGG GTGGGGTCCG CATCCGGTAC CAGTGACAGC AGCCTCTCCT  
CTCCACGGT GTGTCTGTT TGGGGCTGTG GCCAAAGTGT TTGCCCGGCC CTGACTGTN TCCTTCCGA GCTGCCGAGG  
ACTGCAGAGA GGGCCTGGCT TGTCCCTCT AGGAGCAGCT GGGNNGTGT CTGCTGCA TCCCTTCA ATGGTTGAAA

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ATAATGATTG CACTGTGTCAT GAACACCATG AAGGTATCTT GGCAGCCAGA GTCACCTCTG TTCCCGAAGT GGGAAACCTN  
GGGAGGGTCC TCAAAACCCC T

SEQ ID NO:1630: (Length of Sequence = 380 Nucleotides)

CATAAAACCA TCCTACGATG TGCTGCTGCT GCTGCTGCTG CTAGTGCTCC TGCTGCAGGC CGGCCTCAAC ACGGGCACCG  
CCATCCAGTG CGTGCCCTTC AAGGTCAGTG CAAGGCTGCA GGGTGCATCC TGGGACACCC AGAACGGCCC GCAGGAGCGC  
CTGGCTGGGG AGGTGGCCAG GAGCCCCCTG AAGGAGTTG ACAAGGAGAA AGCCTGGAGA GCGTCTGTGG TGCAAATGGC  
CCAGTGACCC CCAGACGCGG AAACCGGGTG GCAGCGCCAG CCTGGGCCCA GGCATGGAAA CGGACAACCC CTAATCGCCT  
TAGCTACTGC TTCTAACAACT TCTTTTCCCT TGTGTTAAGG GAAACCAGGT TCAAGGGGGG

SEQ ID NO:1631: (Length of Sequence = 383 Nucleotides)

AGAGGATTTA TTTGGACAGG GCTGTGCTGA GAGTCCCACC CTCACCCAC AATGGGCGGG GGCCTGGCA TCGAACACCA  
AGCTGAGTGA GAAGGCTCC TCCAGGCCTC GCAGGGAGCT TGCTGGCTTC TCCTGGCTCA CAGCAGACTG GGCCCGACTC  
CCATCGGAGG AAGGCCAGCA TCCTAGGGCA GCCAGTGGAG GGCTGGCAGA GGGCTGTGCC TNGAAGGTCA CTGTGCTATC  
TTCCAACCAC ACTGTGTGAG TCTCAGATAC CATATGTGGA ATCTGCATCA GGAAGGTCAA CTGAGGTCA TTTTAAAGG  
GATTCTTCCG GNAAAAGGAG CNGCCATCG GCGCNCCTTA NCCGGCGTTT CGGTTCATCC CGA

SEQ ID NO:1632: (Length of Sequence = 424 Nucleotides)

GGGAAGTGAG CTCCTGAACC AACTCTGAAG GAGACACCCA CTGCTAAGC CAGTCTCACT CTAGGACACC TGCCTAGCGA  
CCAGCAAACC TGGATGAAA GGGCAAGTTC CTCAGTGCCC CCTCTGCATC AAAGGGAGTG GCTCTGCCCT CTCTAGTCTC  
TGACTACCTG CTTAGTGATT TTTGCTTCTG TGCTCCAGA CCCAAGAAAA CCACGTCTCT TTTCTTCTT CATCGACTCA  
TCCCCTTCTT ACCCTATATT GTCTCTCCA CTCTCTGCT CTGCTGGCCA GGCTTAAATC TGGGCCACCA GCCTTCTGG  
GACATACCTA TTTCCGCAAC TGAACCTTCC CAACCCCTAG GAAACAAAG GTATTTTACA AGGCCTCTGG ACCTTGACCC  
AAAGAGGCAT GNACCATAAT TACT

SEQ ID NO:1633: (Length of Sequence = 417 Nucleotides)

TTTTTTCTAC AGCATCTTTT TATGTCTTT ACCATTACTT TAATGCATTT TAAATTTTAT CTACATTAAT TGGGAACCTAT  
TTGCATTTTT TTCATCTCT CTCTCTTTT CTTTNCITTT TTTTGGATTT GTCTTGGCCA GAGAGGTTCT CCAACACCCG  
GGTGGACTTG GAATTTTTTA TCAGCTGCAA TCTGAAGACT TGCTTTTACT GTGGAATAGG TGACATTCTT TTAGGACCTC  
AGAAGCTCAA GTAGTTTAAAT GCCAAGTCTT TCCAGAGCCT CACTCTCTTT TATTTTTTAA ATTAGAATTG TGATTTTATTG  
AAGNCTTACC ATGGGGTTCA TATAATTINT NAATNGANCA GCTTTATIGA GGTATAATTC AATACCCCTT TAAAGNATGT  
AACCGTGGG TTTAGAC

SEQ ID NO:1634: (Length of Sequence = 423 Nucleotides)

AATATCCCAA ATGTGCAATG CATCACTGA GACAGAAGGC AGAAAGCATC AAGCTCTCTG TTTATCCCAA TTCAATGACA  
ACCAGAACTT ATTTTTTTTG AGATGGGGTC TCGTTCTGTC GCCCAGGCTG GAGTGCAGTG GGGCATTCTT GGCTCATCGC  
AGCCTCCAAC TCTAGTCTC AAGCAACCTT CCTACGTCAG TGCTCTGAGT AGCTGGAACT ACAGGCATGC ACCACCACAC  
TTGGCTCATT TTTAAAAAAT TCTTGTAGA GACAGGATCT TGCTACATTG CCCAGGCTTG AGGTGCCGTG GTGCATTAC  
AGCTCACCGC AGCTCAAACT CTTTGGTCTC AAGCGATCCT CCTGNTCTAG CCTTCTGGGT GGCTGGGCCT CAGGCATACA  
CCACCATGTC TTGGTCAATT TCT

SEQ ID NO:1635: (Length of Sequence = 384 Nucleotides)



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CAAAACTCAC TTGACCCCA TTAAGAGGCA AGCCTGGCAC ATCTATCCCT GGGCCTTAG AAAGCCATTT GCCTCAAATG  
GCTATAGGGT TGTGGGGTGG AGGGAGGAAG GGCTGGGAGG GAGTNGGGAG GAATGCTAG CTGTAGTGTG ACACATTGTA  
GTGTTTGCCA GGAAATGAGC CAGACATGGT GGTGTATGCC TGTAGTCCCA GCCACCCAGA AGGCTGAGGC AGGAGGATCG  
CTTGAGACCA AGAGTTTGAG CCTGCGGTNA GCTGTTAATG ACCACGGCAC TCAAGCCTGG GCAATGTAGC AAGATCCTGT  
TNTCTACAAG AAATTTTTTA AAAATTGAGC CAAGTTTGGG TGGTGCATGC CTGTAGTCC ACTA

SEQ ID NO:1636: (Length of Sequence = 362 Nucleotides)

CAAAATGACT GACTACAGCA ATGCCCTCCG TGTGCCCCAC ACATCATGAG CACCGCAAGA GACAAAAGAT TAACTATGAA  
ATATAGTAAT CTAAGCAAGC CCACACATAC ATATTTTTGG GGATTTCCCA CCATCCTGAA TAGTATCACT GCAGTTGACA  
CAACTTCCAG GGAAGTGCAG AGTAAGTGCT TAATATTATC CACGAGAAAG CAAAACATAA TATTAGTGTG CACATTTCTG  
AATGAGAAAC TAATTGCTTC ATTGATTTC ACAAATGTAGT GGNAGNAAAC TATTTTCAGAT CTCTACAATG CCTAAATGCA  
TTCTATTTAA ACTCAAGGTA CTATTTTCAT TTTTACCATA CT

SEQ ID NO:1637: (Length of Sequence = 205 Nucleotides)

GGGCCCCGAC GAGGCTCAGA CCTCTTNTAC GNCGACTACT ACGAGGACGG CGAGGTGGAG GAGGAGGCCG ACAGCTGCTT  
CGGGGACGAT GAGGATNACT CTGGCACGGA GGAGTCCINA CACCACCAGA ATAAACTTGC CGAGTTTANC TCACTAGGGC  
CGGACCCGTG GCTCCTTAGA CGACAGACTA CCTCACGGAG GTTTT

SEQ ID NO:1638: (Length of Sequence = 253 Nucleotides)

CCTCAGGCT CACCGTCTCG CTCTCTGCAC CAGCCTTTCC AGAGCATNCC AGTNCATCAG GCTTCATCTG TTAAGTGTG  
ATCATTTCAG TCCTGATTTT TAGACCTAAA TGGTTTCCTT AACGCCATTC TAACTGCCIG TGACTCATIT TCATTACAG  
TGTTTATTGT AACGCCAAAC CAACAAATCA CAGGTGCTTG CTCTGTCCA TAAATCTCCC CAGTCTAACT TTTTGTCAAT  
CAACATGRCT CGT

SEQ ID NO:1639: (Length of Sequence = 360 Nucleotides)

TGTGGCCAAG GACCCTATCG TCAATGTATG GTACTCTGTG AATGGTGAGA GGCTGGGCAC CTACATGGGC CATACCGGAG  
CTGTGTGGTG TGTGGACGCT GACTGGGACA CCAAGCATGT CCTCACTGGC TCAGCTGACA ACAGCTGTNG TCTCTGGGAC  
TGTGAACAG GAAAGCAGCT GGCCCTTCTC AAGACCAATT CGGCTGTCCG GACCTGCGGT TTINACTTTG GGGGCAACAT  
CATCATGTTC TCCACGGACA AGCAGATGGG CTACCAGTGC TTTTGTGAGC TTTTGTGAC CTGCGGGATC CGAGCCAGAT  
TGACAACAAA TGAGCCCCIA CATGAAGATC CCTTGCAATG

SEQ ID NO:1640: (Length of Sequence = 321 Nucleotides)

GTGGGACGCC CTCTGCCCTG TCCTGAGAGC AATGTCTTCT CCATGGGGCA GCATNGGCC TGGATGGGCC TGAGCATAGC  
AGACCACTG GTCACATGTG CATGTGTGGA CATGTGTGCA TGTGTGGATA TGTATGCTCC TGAGTGTATC TGCATGTCTT  
NCTGCACAC ACAGTGTCTC CCTCCGATGC TGCCAGCCTG TGGTGGACTT CCTCTTCTGA CCCCCTTCTT GCCNCCGGNC  
TGTTTTATCA GTGAAAGGAC TTAATAAGC AGATCTCCAG GTTCACCTIN TGGAACTCAG CTCAAGGTNA GCACAGCAGG  
T

SEQ ID NO:1641: (Length of Sequence = 266 Nucleotides)

GGTGGTGCCA CTGTCTGTAT AGTTTTTCCC ATCTTAGTAG CCGNACCCAT AATTAATGCC TACTCACATC AAGTTAGCAC  
CACTCAAATG TGGGCCATTC ACAGGCAGCC AGGGATCCTC TTGNCCGTG AGGTGGGGG CTINCATCAG AATGCAAATC

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TRCCGAGGCG TGAAGCACAA TTTAKTTCAA CTGCCATKTK TTCCTTCACA GTAAGRCCTT CTGGRGGAAG GAAGCAGTGT  
GTTTGAGTTA TACCTTAGGC CAAGCT

SEQ ID NO:1642: (Length of Sequence = 295 Nucleotides)

AAAAGCCCCA GCCTCAGGAC CCCGGTCACA GGCACCCGGG GGTGGGGGTG ACCAGCAGCA GTTCAGAGGC AGGTGTGGGC  
AATGTGGGCC TGAGTCTCCT NCCCACTCAC GTCACINCCC GCGGGGACAC AGCGGCATTT NTGGGGCACT NGGCATGCCG  
GGTTCCTAAC CTCAATTATT CATTCTGCTC TCAGGCACCT CCTGACGAGA CCTGGGCCA GGAGAGCTCG GCTCGGGGAC  
AGAGGAATGA GACTCAGTGG GACGCAGAGN CCAACCCCAT CCCCACCCCT GGGCT

SEQ ID NO:1643: (Length of Sequence = 359 Nucleotides)

ATCATTGGTA GTTTAAACTT TTCATCTAAT ATTAGATTGC ATGCAGGATT TTATATCTAA TTACTCTGGC AGATGGCCTT  
TAGAAAGTTC AAAAATAAAA TGCAGCAATT CATATTGGCA GATTACTAT TGAGACCAAT GCTTTCTTAA CTAAAAGGTT  
TTGTTTAAAA TCGTTAGTTT AGGAAATCTG ATAAAGATTT TTGAATATCA GAGCGTTTAA AAGAGATTCT TACTTTACAT  
CTGGCATATT TCTGTGTTA CATATTATAA TTCCATGGGA ACATGGCTGT CTGTAAACT ATGTATATGA TCCGGAAGAG  
ACTCAAATTA AATTAAGTTT TAACAGCCAT CAAGTTCAT

SEQ ID NO:1644: (Length of Sequence = 293 Nucleotides)

TGAACCCGGG NGGCGGASTT GCAGTCAGCC GAGATGGCAC CACTGCACTC CAGCCTGGGT GACAGAGCCA GACTCTGTCT  
CAAGAAAAAA AAAAGAATTA AAAGATGTGA ACAAAGCAA GAAAGTGCTG TATGAACGAA ACGGAAATAT CAATGAAGAG  
AAATAAAAT TATAAAATTC AGGAAATGAG ANGTACANTA NCAGNAAATT CACTGGAGAG ATTCAAAGC ATATCTGAGC  
AGGTAAAAAA AGTAGTGAAC ATGAGATAGG TCAAGGGAAA AGTACTGAGT CTG

SEQ ID NO:1645: (Length of Sequence = 332 Nucleotides)

AAAAGCTGGA TATTAGGAAA TGTGAATATT AATTCTGAAT TTGTTACTGA CTCAGGATGA CCTTGCAATGA TGCATCCAAC  
CTTCTTTTCT CTATATCAGA AAATAAAGA ATAAATGTAA CATCACATTC TTTTCTCCTT TGGGACAAAC AACTATGTAC  
AATGAATAA AAATGAAATT GCATAAGTNG TGGATAGAAT ATGTTTGGGT TGGTTTGAAC TTAGCACACT GTTTAATAAT  
TCAACATTTT TTATACCTGT GCAATAAATT TTTAAATGAT GTCTGAAATG CTTTGAAATC TTCAGAAACA GGTTTATAAA  
TGGCATAAAA AA

SEQ ID NO:1646: (Length of Sequence = 210 Nucleotides)

GAAAGTNCTC CCAATCACTC TCTGCACAAT GAAGTGGCGG ATGACTCCCA GCTTGAAAAG GCAAATCTCA TAGAGCTGGA  
AGATGACAGT CACAGCGGAA AGCGGTGGAA TCCACATAG CCTGAGTGGC CTGCAAGATC CAATTATAGC TCGGATGTCC  
ATTTGTTTCA AAGACAAGAA AAGCCCTTCC GAATGCAGCT TTGTTAGCCA

SEQ ID NO:1647: (Length of Sequence = 246 Nucleotides)

TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT  
GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA  
CTNAGGAGTA GCTGAGAGGA AAATNAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA  
AGGGTT

SEQ ID NO:1648: (Length of Sequence = 338 Nucleotides)

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TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT  
GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA  
CTGAGGAGTA GCTGAGAGGA AAATGAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA  
AGGGTGGGGT TTTATGINTG GGAAAGGGAC CCGAAGCCCA GGCTGAAGAG TTTTAACTTT GGGCCCAGAA ACTCAACCAT  
CAATGGAAAC AGGGCAGT

SEQ ID NO:1649: (Length of Sequence = 275 Nucleotides)

GCACCTINAG GATTGAGACC CGGAAGGCTT CAAAGGCTGT CGCAAGGAGG AAGAAGTGGG AGAAGTTCGG GAACTCAGAG  
TTTGACCCCC CCGGACCCAA TGTGGCCACC ACCACTGTCA GTGACGATGT CTCTATGACG TTCATCACCA GCAAAGAGGA  
CCTGAACTGC CAGGAGGAGG AGGACCCTAT GAACAACTC AAGGGCCAGA AGATCGTGTG CTGCCGCATC TNCAAGGGCG  
ACCACITGGA CCACCCGNTG CCCCTACAAG GATAC

SEQ ID NO:1650: (Length of Sequence = 270 Nucleotides)

AAAAGCCAGA GGGATGAGAA TGAGAAAGTT AAAAGGGAGG TCAGGAAAGC CATCTTTTAG GAGAAATATA AATNGACAAT  
SCTTTAAAAA AGGAGCTGCC ATCATATTAT ACCCTGACCC AGCTGGATAC GAACAAATTC AGCCTTGGCA ATGCAAGTCT  
TACATCTATT TTATATAGAT TGATATAAAG AGAACTGGAA GCATTTTCAA GAGGGGTATG TATGTGTTTG TGTGTGTCG  
GTAATTAATG AAAGAGAGGC TATGAATTT

SEQ ID NO:1651: (Length of Sequence = 372 Nucleotides)

TCTTGCTTTT TAATGTIATT TCTTAACACT AGAATTTTCT ATTTCAAGTT TTTGTACGTG GCCTTGOGTC TCCTTAGTAC  
ATTTTATAGT CQCTGTAAAT TGATTCCATT TTTCTTGAAA TTGAATTCCT ATCTGACCTA ATTTCTTCCT TGAATCCTAC  
ATCTCACITT CTCAATGGAC GCAGTGACGC AATGAAGCAT CCAGCAAAGC TTTTGTGTGT GATGTGTTAG GACGTCACCC  
TGTTTTGTGT GAAGTGTCT CACAACACT TCTCTTCTG CTTTCTCTCT TTCAATATGA CATGTGTTTT CTTTTCAAAT  
GGATTAACTT TATGATCAT CCTCTGINC TTCTAGCAA AGACGGGTGC TT

SEQ ID NO:1652: (Length of Sequence = 314 Nucleotides)

TTTCTGAGTA TGCTGCACTG GATTATTAGC ATGTTAAATA GTCAAAGGGA CTGGAATAAA CATCAGGAAG ATTTCAATAA  
GTGGTGTAAG TAGAAAAAAA AGGTAAACA ATGAGCTGCA TGTGATAAG TATAAGACAC TGATCCAAGT GGTGGCTTCT  
GAACCATGAT ATTACTTAAN CTAGAGTGTT AAGGTCAGCT TAAGTCAAAA TAAACAAAG CTTCCAAACC CTCATTTTAA  
ACACAGTAGA TAATAGATGA NTCTGTATC TTGGGAGATA GTACAAGCCA AANGTACAG CTGTGTTAA ACCT

SEQ ID NO:1653: (Length of Sequence = 323 Nucleotides)

TAGATATGAT GGCTGGAGCT GCAATAGCTA ACTTGCAACT ATGAGGAAGT ATAGGACTTT GGTCTTAACA TTCTGAGCT  
CCTGAATCAA TACTTTAACT ACCTCTATG AGACTTCTTG TCACATGAGA AAAATTAAAG CCCAAATTAA ACCCCTGCCT  
TTNACTGTAA CTCTCAATTG AGCATAATTC CTAAATGNTT TAATCAATTC TACTCTACTC TGGCATGATT TTNAAGGCAT  
TAACCATAAT TTCCTTCCAA TCTAAAAAGG GAACTANTAC TTACTGGAGT ATCTAGTATA CATCAGATAC TGTGTATATA  
GGC

SEQ ID NO:1654: (Length of Sequence = 352 Nucleotides)

ATCTTGGCCT GCAGGAACAT GGCAAGGGCG AGTGAAGCAG GTGCACGCAT TTTAGAAGAA TGGCATAAAG CCAAGGTAGA  
AGCAATGACC CTGGACCTCG CTCTGCTCCG TAGCGTGACG CATTTTGTCT AAGCATTCAA GGCCAAGAAT GTGCTCTTTC  
ATGTGCTTGT GTGCAACGCA GCAACTTTTG CTCTACCCCTG GAGTCTCACC AAAGATGGCC TGGAGACCAC CTTCAAGTGT

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AATCATCTGG GGCACCTCTA CCTGTGCCAG CTCCCTCCAG GGATGTTTTG GTGCCGCTCA GCTCCTGCCC GTGTCATTGT  
GGGTCTCCTC AGAGTCCCCA TCGATTACA GG

SEQ ID NO:1655: (Length of Sequence = 325 Nucleotides)

AGGGTAAATT GTGAGACTGT TTGTATATAT TTTTGTGTTA TAGTTTTTGT TGTGTGTTAT GTTGTATNT TTATTATATA  
AATGATAGAT CTGTGGGTAG GTTCTGAGAA ATGAATAGCT TGTATTTCCT TTTTATGAA AGAAGAACAA AATGAAGTTC  
AAGTGAAAG TATCTCCAGA AAGTTTAAACA TTTTCTTATT AACCAACTCA TTGATTGGCA TGTGAACTT GAGATATTTT  
ATATAGCACT TTTTAAATGA GGATCTAGCT TCACINATC ATACAACCAC ATTTAAATA GCCAGGTCCA TGGTCATTAT  
AGGGG

SEQ ID NO:1656: (Length of Sequence = 285 Nucleotides)

GAGGNTTAAT AGAATAGATC AAAGCAGAAT GCAGTGTGTT CATGTCATAG GTTGACTTCT CCAGGAAACC GACCCCAAGT  
GGAAGGTTTA CATGCAGGTG GTTTATTAGA GAGTGTGTT GGAAGAACA CCTGTAAGG AAGAAGGGAG CCTGGGAAGA  
GCAENGNAV AAGGTGAAC CTGATTCAT TGCAACAGAG TCCTAGGCTG AGTGCATGG ATNCTGTAGA GTTGGGGATG  
GACCTTCAGA GATATTCCAA ATAGAGAAAG AATTCTGTT TACTC

SEQ ID NO:1657: (Length of Sequence = 385 Nucleotides)

GACTTGACTT TGCTTTTTTC CCCCCAAGTA GAACTAATGC TAGCTTCCAG CTGAAAGTA AAAGTCCAGT GTGGAGTGAA  
TTTGTGTCT AATTATAAAC CTGTAACCAA AACTCAGACA TCTGGTACTG GTCTTTGCAT TGAGATTGGT CCCTGTAAAA  
CCCCTTTAA AAGCATATTG CATTTAGTAC AGAGCTCTT TTTGAAATG AGGCTGGAGA TGTGCATTT TCACGGTGT  
AACTGGTGT ATCTTATTAG CAAGGAGATT GGGGGTTTT AGTGTGCG TGGGTGGGT TCAAATTTGC CAGGGGAACC  
AGTGGGCAG CTGCTAGCAA GGCAGTGAG AAGCTCTTG CAGCCAAATG GGTGCATTT CAGGG

SEQ ID NO:1658: (Length of Sequence = 338 Nucleotides)

GATCAGGACC TCTTCTCCT CCAACACTG CCAAGAGC CGTGTGTTA ACGTTTACCA GCACACTACT GGGCTGTTT  
TCTACCACTT GATTGAAATG ATCCTTATG AAGCACAAT GACTTCACTG TCACTAAATC CAAGGGACAA TTTTATGCT  
CTATTTTCT TCAACTCTCC AGGATGTTG AGAGCTGATC TTCCCTCCC TCTTGAGCCT CCTCTCCTGC CTGGCTTTTA  
GGGTCTCTG CTGACTTTT TCAATTTCT AACACATG CTACGGGGT CCTCAGCCCT GCAAGGCCNA TGCAGTGGT  
ACCACTCCT GTGGGCT

SEQ ID NO:1659: (Length of Sequence = 346 Nucleotides)

AGTATGTGAA GTCAATCACT TTTTATATG AGATAATATG CGACTTATAA TGAAGGTCA CGTTTCAATA GCAAACAAA  
AAGCTATAAG TAACAAAGAA TAACAAAAT ATAAATGTAT AGGCTCTACA TAAAGAAAAC TATAATTCCA TAAAGGATCT  
AAAATAAAAC GNGTAAATGG AAAGACAAGA TGTGTGIGA GATACGAAGA ATCCATGATT AAGTTAGAGG ATTCTTGGAT  
GACAGTAGAG TAGAAAGCAC CAAGAATGAG TCTGTATACC CAGAGAACAC TTACGCTGGT AGGAATCTAT CTCATACAC  
TATTATGGAG CTCTCAAAGT ATACTG

SEQ ID NO:1660: (Length of Sequence = 240 Nucleotides)

GATAGAATAG CCAGCCTTCC ACTTGAATGC ACTGCCATAT TGTCAAGCTG CATTCTTAA GCATCACTTC TTAGAGGCCT  
CAAGCTTCTC GGGATGTTT GATGACTTAA AGGGGAAATG AACAGGTGC AATNATGCTT GTCAAGNTTC TTCTTGTA  
CCTCTATTTG GACAATTCAC ACAAAAAAG AAAGCAGCTC ATTTTCTAAT TCAGGATATT ATTTCTTTT AAAACTGGTA

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SEQ ID NO:1661: (Length of Sequence = 294 Nucleotides)

AGCACCTCCC CTGAGGGCCA GGCCTTGGAG AACCGGATGA AGCAGCTCTC CCTACAGTGC TCAAAGGGAA GAGATGGAAT  
TATTGCTGAC ATAAAAATGG TGCAGATTGG CTGATTTCATC CTGGGCCCTG GCCGATATGC ATATCAACAT TTATACATGG  
AACTGTGAGA ACATTKTGCC AATAATCAIT TAATATATGC CAAATCTTAC ACGKCTACTC TAAACTGCTC TAATGAAGTT  
TCAGTGACCT TGAGGGCTAA AGATTINTCT TCTGGTGTA GAGCTCTTTG GGCT

SEQ ID NO:1662: (Length of Sequence = 291 Nucleotides)

GATTTTCATC AGGCAAATNA AAGTAACCAC AGAAACAATT CAGTAATACT ACTAAGAGAG ATTAACITCC CACTGGCCTT  
GGAATAGCTA AGTGCAITGA TTTTKTGTA GTTGAGAGTT TTTTCTYTC ATGATATTT TACGTATTC TGGGGTAAAT  
GTATTTTWA CATGCATTGA ATGTGTAATG ATCAAGTCAG GGTATTTGGG GCCTCCATCA CCTTGAGTGT TTATCATTC  
TATGTGTTGT AACATTCCAA GCCCTCTCTT CTAGCTTTGG AATATATAGT G

SEQ ID NO:1663: (Length of Sequence = 345 Nucleotides)

GGCAGTGGGA CTCTCTGTGG ATAGACTGAT TCTTGTTTAG AAACAACAGC AAAAAGAAGA AGGCAGGAAA GAACTCCCC  
GGCTCGGAGG AATGTCTCTG TGATCCCCAT TCTTGATGGA GGGAGTGAAG AGGGGCCCTG NCTTCGCCC CTGCTCTCT  
GACAGAAACA GTAAGTNACA CCAGGACAGA AGGCAGGAGC CCGAGAACT CACGGCGCTC TGCATGGTCT CCAGCCNNNC  
ACCGTCTCC AGCCACCCCT GGAGCGGCG TGGGGAGGCG GCAGAGGGGG CTTTTCGGAG GGCCCACTAT TNCCACACGT  
CTTCTTTTNG ACACCCAGAA AACTT

SEQ ID NO:1664: (Length of Sequence = 334 Nucleotides)

GTAAATAAGA AAGTGAAATA ATTCCTATAA TGTAAGGTTG ATAGAAGATA ATCATCAGGG TCAGAATTAA GAGGTCTGT  
GGTTTAGGAA GCATAAAAT ATGTAACCTA TTGTTTATTT CACTCAGAAA ATAAAGTAT TAATGAAAGG AGTTAGAGAT  
GAACAGATTG ATACAAACTG TTCTATGGTT TACAGCTTAA AAAATAAAGG TACATTTAAT GCTATGCATT TTGAGAATAA  
TGCTTTTAT GCINTTCCTT TTTACATAAG TATCINTTTG TATTTAAGGT CAAAATAGAT TGACATTACT AATTACTTCA  
CTATTAATAA TTAA

SEQ ID NO:1665: (Length of Sequence = 310 Nucleotides)

TGTACINCTA TGAAGCATCC CTCCACATC AGATCAAAGA CATCTTAAAG CCAGAAATAA TGGAGGAGAT TGTGATGGAA  
ACACGCCAGA GGCCTTTTGA ACAGGAGGGA TAAGGAGGTT CTCCAGAAGC ACGGGACTNT GGACCTTGCA GGAGTGAAGA  
CTGTRATGTG TGGTCCCCAT ATGTGGCTCA GCAAAGACTC GAGAGATCAT CCTTTGTCT GCATTGACGG CCCTGTGACG  
GCCTCCAGCC CACAGGCCTG CTTTCTCTG TCCTAACACC AAGCCTGGGT GGCAGATGAA CAGTGCTTCC

SEQ ID NO:1666: (Length of Sequence = 352 Nucleotides)

TTTTTTTTTA CATACAAAGT TTGGATTTTT ATTGAAATCT TGTTAGGTAT CAAACAAATT CTGCTTTCTT CAGATAAAAA  
TATCTCTCA GATGCTCCA GATAACTGCT AAGTCTAAAT TGGTCTTCA ATGCTTATT TTATTGTCC TCGTGAATG  
TTCAATACA GTTAAGATGT TCCAAAAGG ATTTTATCG TGTAAGGAG CGTACATGAC GACCTCTACC ACTGCCTCCA  
CTAACAACT TTCTCTTGA GCCTCCACTG CCGCTATTG CACTAGCCCA GGAAGGTCC AAGTCCCCCA CGACCTCTAG  
AAGCACGGTT CCGAGGGACT TTGGCGGTAA CC

SEQ ID NO:1667: (Length of Sequence = 287 Nucleotides)

GACAAATATG CCGCTGCCCA CATTTTGGTC CATCTTTTT TTAATTATGC TTCTCTTCT TGGACTGGAT AGCCAGGGAT  
GTTTCANCTT CTCGCTGCTC AAGTACGTAC CCTGACCTA CAACAAAACA TACGTNTACC CCACTGGGC CATTTGGGCTG

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GGCTGGAGCC TGGCCCTTTN CTCCATGCTC TTNGNTCCCT TGGTCATCGT CATCCGGCCT CTGCCAGACT GAGGGGGCCG  
TTCTTTTGAG AGAGTCAAGT ACCTGCTGAC CCCAAGGGAA CCCAACC

SEQ ID NO:1668: (Length of Sequence = 300 Nucleotides)

CCAGACAAAT ACCAAGTTTA TTTCACAAAC ACTAGGAAGA TGGGTTGAGG GTGGAGGTGG GGGACACAGG TGCGCANTGC  
ACAGAGTCAG CAGCAGCAGC CTGNTCCCG CACTGAGGAC TCGGCTGGA CTGCAGTGCC TCCAAATCAA CACGCAGCAA  
GAGGGGAGTIN CAGNGAGGGC CCTNAACACC AAGCCTCTGA AAGGCTAAGG GACACAGCTC CATCTGTCCC AGGAAAACCA  
GCAATAAATA AAAGTNNGGC ACGGCCCCAC CCACACATAT CATCTAGTCA CCCATCTTCA

SEQ ID NO:1669: (Length of Sequence = 334 Nucleotides)

TTTAAATGAC AGATTTTCCT AAAAGAAACC ACTATAACAT CTGTCCAAGT ACTCCAGAGA AAACAAAAA TACATAAAGA  
TAAAAGTCT ATTACTTTAA CAGCACATTG CCAACACGG ACAACTAGGA TAAATGCCAA GAAACCTTAA AAAATAACTT  
TAAAGATGC AACGTTCAAG CCATTCAAAC GCGTAGGTTT CACAAACAAC AGGNNACAA GTCCAAGAGC AGTTCTACTT  
GTGCATGATG GTAACTCAGA CTGTACTTCA TCAAAGTICA TTCAGGTGTT TCATAGGCGT CTGAGCAGAG TTTTGTITTT  
TTCTTTCCTT GCTT

SEQ ID NO:1670: (Length of Sequence = 287 Nucleotides)

GATAAAGAG AAACAGCGAA GTTTCAGAG AAAAAGTTGA GGTCTTAATA ATTNTGGGC AACTTGACAG CAGAACAGGG  
TAAANTGAG TTAGCTACAA AGGCTCATCA GAAATGGCA ATAGATTCCA GAGAGATTTA ATAACACTT ACAAACTCTG  
CTATAGGTGA CAAATCTGAC CATGATAAAA GCACCGTAAA TGATATAGGT AACACTGNGC ATATGAAAAC TCAGACTGTG  
CACTAGATAA AAAGGAANCC CAGCATACAG TGTTACCACA TGTAAT

SEQ ID NO:1671: (Length of Sequence = 187 Nucleotides)

GATAAAGAG AAACAGCGAA GTTTCAGAG AAAAAGTTGA GGTCTTAATA ATTTKGGGC AACTTGACAG CAGAACAGGG  
TAAANTRAG TTAGCTACAA AGGCTCATCA GAAATSGCA ATAGATTCCA GAGAGATTTA ATAACACTT ACAAACTCTG  
CTATAGGGTG GACAAATCTG GCCCATG

SEQ ID NO:1672: (Length of Sequence = 329 Nucleotides)

ACATCACAAC ATCGTTTATT ATGTGAATTT TTTACAATAC AAACAAAAA TACAGAAATG CAATATATGA ATACAGCTAA  
ATGCAGAATG GTGACTTTTT TCTCTTCAAG AGGCCATGAT TCCCATTTCT AGTAAAATAA AGAGACTGCA TATAGGTAGA  
AACAGGTTGG TCATTAGCTT CACAATTTTG CCTAGAAAATG ATCTATAAAT GCATTTCCTC CCTGCTACT TACCCTAAAG  
TGTAAGGAGG GAGTTAAAGG AAAGTTTCCT TGTTGGTTCC TACCATATGA AAGATGCTAT ATTCTATTTT AGCAGTGCCA  
ATATATGGG

SEQ ID NO:1673: (Length of Sequence = 386 Nucleotides)

CTCCCTACTG TGATTCTCAT CAAGCTGGAA GCGINGTGAG AAAGCACCTC AGTTTCTTCC CTGGATATG AACCTGAGCT  
CTCTGATGAG GTGGTTTAGA AGTGGCCCTG GGAGAAGCCC ACTTCTTGGT CACAAGATAC TGCAATCTCC TGGCAGATGA  
ACCAGCTGCT TCCAGCATCC TCTGTGTGGG TCCTCACGCC TAGCTGCTCT ACGTGTGGC TGCAAGTGG CATCACATGG  
GGAAGTAGAA AAACCTCTGA TGCTGTCCC CACCGGCTT AATCACAGTG AAGTCAGATT ATCTGGGNT GGGACCTAC  
CATCATTTTT TTTAAGAAT TGCAGGGGCC AGGGGTGGC GGGCTTCAGA GCTTCTTAGC AATTTT

SEQ ID NO:1674: (Length of Sequence = 377 Nucleotides)

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CTGAAATTTG GCAAGAAGGG GCAAAAACGT GACTATTAAT GATTGATAAG CACCAGTGAA GAAGTTCTAA CTTTTAGCAT  
 GCTGCACAGA AACTGGTATA ACATGCCTTC AGTATACTAA CACTCATATG CTCAGTTTTG TTTTGTITTTG GCAGTTGACA  
 AGAAGTTAAT TTGCTTTAGT AAAAATCCCT CATTCCAGCC TTTCTATATA AATAGCTCTT TCTTGCTGTT TTAATGTGGT  
 GCACACTATA GCCTCACAAA CCTGTTATTC CAGTGTAATC TGCAGTGTG TAACTAAAGT TACTGGCTTG GGTCTTATTT  
 GCACAGTTTT TGCGNCTTGT TTGCTTCTTG CATCTGGATT AACTAGGAAT ATTTCTC

SEQ ID NO:1675: (Length of Sequence = 381 Nucleotides)

CAGAAGTCAA TCAGCTACGC ACCCAGTTCT CAAAGACCTC ACATGCTAGG GAAGGTGCGG AGGCAGAGTT GTGGTTCAGA  
 AGCAGTTACA GGTCTCAAAG CAAGAACAGC AGCCAAAGCT TCCAGCCCT GACGCTGCCT CTGAATGGTA AACCAATGGC  
 ATATGGTATC CACAGCTAGG CTTTGCTTTT TTCTGAGTGA AGGTAAGAGG CATTTGAAAA TAAACCAAAG TTTACAGAC  
 TATGTTTATG GAACAAACAT GGGCCATTTT CAGGGATATA AAAGTCGATG TTCTATGTAG GCCCCCATAT GAGTATTTAT  
 CTACTTTTTA TTTACTTTAT TTTATGGAAT TTATTTGCA AGGGGCTTCA CTCGTTCGG A

SEQ ID NO:1675: (Length of Sequence = 404 Nucleotides)

CTGTGTGAT TGCTTGAGCC CATCACAGTT TAGCTCTCAC AGCTTTAATT TACTAGCCCA TGAGAAGTCA GCTTCAAAGA  
 ACACCATTTT GACTCTCAA GAACATTATC AATGTACATG GATAGCTTC AACTTCATAA GGTGTTTCTC TCTACCTAGA  
 GCAATTAACA TTAATTTGCA GAATAGTGT TATTGAAAAC CTTTGIGTAT CTCCAACAAA GTAATAGTGT ATTGATTTCA  
 TTCTACTAT CTCAACTGT ATCATTAGA GGAATTTCTT AGGTAAGTCT ATATGCAGTA AGCAAGTAAG ATCGCAGAAC  
 ATCAAAGGNN GGAAGTAAAT CCCAAACTG GNTTTTACCT TCCTTTCCCT TAGGTGAGGG AAAGGAATTT ATGGTTTTAA  
 AGCT

SEQ ID NO:1677: (Length of Sequence = 388 Nucleotides)

ATGGACAAC ATGAGCCAGG AGTCTACACA GAGAAGGTTT TGGGAAGCCAC TAAGCTGCTC TCCAACACAG TCATGCCACG  
 TTTTACTGAG CAAGTAGAAG CAGCCGTGGA AGCCCTCAGC TCGGACCCTG CCCAGCCCAT GGATGAGAAT GAGTTTATCG  
 ATGCTTCCCG CTTGGTATAT GATGGCATCC GGGACATCAG GAAAGCAGTG CTGATGATAA GGACCCCTGA GGAGTTNGAT  
 GACTCTGACT TTGAGACAGA AGATTTTGAT GTCAGAAGCA GGACGAGCGT CCAGACAGAA GACGATCAAC TGATAGCTGG  
 CCCAGAGTTG CCCCAGGCGA TCATGGCTCA AGCTTCCCA GGGAGCAAAA AAGCCGGAAG ATTTTCGG

SEQ ID NO:1678: (Length of Sequence = 428 Nucleotides)

TAACGTGCA AATAATCCAT GAATATATTG TTTTATACA GCATTACAGA TAAGGCTTGC AGCTCTATAG ATCACCTCA  
 TCCACTCCTT CACTCCATTG CTACACTTAA AAGCCTCACA TGCTCTCCTG TCCTCTCCAA AGGCAGCTGC TAGCATCAGC  
 GCCCACAGTA GCCCTCTTTT GTTCCCTGTT TATAAACCAT ACATTTTCTA TGGCTACACA TACGTGTATT GTTTGATGCT  
 TTCTAATAAA ATTGTATCAT AGTGGTACAC ATCTTTTACA CTTTCCINAT TACAGTCAAC ATTTGGNGGA ATACAGAATG  
 CAGCAGATCA AGGANCTTTT CTCAGTCTTT TCTAACATGN CCCCAAATAC AGCCTCACTA TGGGGTCCAT TTAGNGGCT  
 CATTGGTTTT CACTCTCACA ACGGTGGC

SEQ ID NO:1679: (Length of Sequence = 256 Nucleotides)

GGTGTCCACA GCCTGCTGCC TGGCCTGGAG CAAATACCTT TGTTAAGTGC TCAGAGGGTA TGGCCCTCA AATCCACCTT  
 GCAGCTCCCT GGCTGCAAT AACTCACTC CATCTTTTCA ACTCGCTCCC TGGACCCCTG GTTAACACTT CACTGTAACT  
 CCTCAGTTGT ACAAAGCAIT TTCATTTGAA TACAAAAGGC AACINGNCAC CANATGGGCA TCCTTGAGCC ATGGTAAACA  
 CTGAATTTNA GGCTCA

SEQ ID NO:1680: (Length of Sequence = 438 Nucleotides)

TACCAGTAGT TCCTTTCCCG CTTTATTTTT TAGCTGCTTT TTGGGTTTTA TACAATGAAC ATGTATTAAT TGTAGAAGAA  
AACGATGTCA TCCTTTATGA TAAATCCAT TTCCATTTTA GCTTTTTTAA AAAAACAATA AGCTGTTGTG GACAGATGAA  
CATCCAAGTA CTGGGCACAC CTCAGCCCT CCTCTTCCA CTGAAGGCCA TTGCCTATTC CTAGAAAGTT CTTTCCCAGG  
TATGCAGCTT TCAGTTTCCA CTTCAGAGGC CACAGTGTCT GGGGGAACGG ACTGCCCCCA ATACTAAAGG GAGTCAAAT  
CTCTTTAATT NCCGCACTTC CTCAGTACCA ACAAGGAAGT CCTTCTTTA GGGCCACTGG ATGGGAACCT NGGGACCCCC  
CTTTTTTGAT TGGCAAGCAT TGGGNTCCT AGGGCCTT

SEQ ID NO:1681: (Length of Sequence = 370 Nucleotides)

GTCTGGGAAG GGTACAATGT CGTCCGCGCC TCGAGGGCCA TGATTGGACA CACCGACTCG GCTGAGGCTG CCCCAGGAAC  
CATAAGGGGT GACTTCAGCG TCCACATCAG CAGGAATGTC ATCCACGCCA GCACTCCGT GGAGGGGGCC CAGCGGGAGA  
TCCAGCTGTG GTTCCAGAGC AGTGAGCTGG TGAGCTGGGC AGACGGGGC CAGCACAGCA GCATCCACCC AGCCTGAGGC  
TCAAGCTGCC CTTACCACCC CATCCCCAC GCAGGACCAA CTACCTCCGT NAGCAAGAAC CCAAGCCCAC ATTNCAAACC  
TTGCTTGINC CAAACCACTT ACTTCCCTGT TNAACTTTTG CCCCANCCCA

SEQ ID NO:1682: (Length of Sequence = 397 Nucleotides)

ATGTAATCCG CTGCACAAA CACACCTCA CCAACCACAT GGTTTTTAAG TTTGACTGCA CAAACACACT CAATGACCAG  
ACCTTGGAAG ATGTINACAGT GCAGATGGAG CCCACTGAGG CCTATNAGGT GCTCTGTAC GTGCTGCCC GGAGCCTGCC  
CTACAACCAG CCCGGGACCT GCTACACACT GGTGGCACTG CCCAAGAAG ACCCCACAGC TGTGGCCTGC ACATTCAGCT  
GCATGATGAA GTTCACTGTC AAGGACTGTG ATCCACCAC TGGGAGACT GATGACGGAG GCTATGAGGA TGAGTATGTN  
CTGGGAAGAT CTTGGAAGTT TACTTGTAGC TTGTCACAT TCCAAAAGGT TCATGGAAAC TGAACCTCGA GCAGCCT

SEQ ID NO:1683: (Length of Sequence = 396 Nucleotides)

GGCTGCGCAG AGGAGCCGCT CTCGCCCG CCACCTGGC TGGGAGCCCA CGAGGCTGCC GCATCCTGCC CTGGGAACAA  
TGGGACTCGG CGCGGAGGT GCTTGGGCG CGCTGCTCT GGGGAAGCTG CAGGTGCTAG CGCTGCTGGG GGCGCCCAT  
GAAAGCGCAN CATGGCGGCA TCTGCAACA TAGAGAATTC TGGGCTTCCA CACAACCTCA GTGCTAACTC AACAGAGACT  
CTCCAACATG TGCTTCTGA CCATACAAAT GAAACTTCCA ACAGTACTNT NAAACCACCA ACTTCANGIT GCCTCAGACT  
CCAAGTNATA CAAACGGTCA CCACCATGNN AAACCTTACA AGCGGGCAIT TTAATTNCAA ACANCAACCA GGGGAT

SEQ ID NO:1684: (Length of Sequence = 417 Nucleotides)

ATCCAGGGGA GATGCATGTG GAAATGTGGT CCTCTGGGT CAGACCCCTG CACGGGACAT CTTGCCTTTN AGTGTGCAGA  
GTACATGGGG AAGGGGCTGG GGGCACCCT GTGTACCTGG GCCAGTAAG GCATTTGCCG TGATTCACAC AACGGGGTCA  
AAAGCTGGCC TTCAGGGTGA CCTAACACCA CCTCATGCC TGCTATAGAC CTTCAAAAC GACTTCCACT GCTGAAGCCT  
GTAGGCTCTG TTTAGAGACA AGAAGATGGC TGGTAATTTA AGCACCGATT TCCCAAGTGC CCACTCTCTT TTGTGCTCTG  
TTGGCTTTTG GCCTAAAGCT TNNCCAGAG TTAGGGTGTG GGATGTCTGT GGTCTGTGAG ATGCCCTTTC CTTCCCCCT  
CTGCTTCAAC CGTGGTT

SEQ ID NO:1685: (Length of Sequence = 429 Nucleotides)

GAGCCATGGA GAACTCTGAA AGGAAGAATC GCTGCTTINC TCAAGCAAAT CGGTTTCTTG ATGTCTTTTG GTTCTCCTTG  
CCTGCNCTG ATGCTTGNC CCTTTAATT GATCAGAGTG CTCTAGAATA ATGGATGGTC TTGGATGATG GATAAATAGG  
GACAGGGACA GTTAAATTGG GAGCCTTTCT TACAACCTIN ATGGGATTTT CCCCCCAAG TTCTCTCTC CACTGAAATG  
CCACACTAAT GCTGTGTTGG ATTCATGAGG TGGCCAGACC AATGTGTGT TTTGTGTG TTTTTTTTTT AAGCTTCCCT



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TGAGAGAATA AATGGGTAAT GGGAGGAGAA CTATTTTAAAC AAGGGTCCTG GGTTCCTCTT TGCAACACA GTAGGCTTAA  
ACTTTGCCTG CTTTTTAAAA TGGCATTIT

SEQ ID NO:1686: (Length of Sequence = 445 Nucleotides)

TGTCCTCATA ATATAACAAC ACTAATACAC TAATAGTAAG ATTAAGTTAG GCAGTCTTCT ACCAAATGTG TAATGGAGAT  
TGCTCAAAA TTGTGTCCAC ATAATCCACG CTCATCTTGC AAAGCGCTAT TTCAGGCACT TTTTTTGAG AAAGAGTCTC  
ATTCTGTGCG CCAGGCTGGA GTGCAGTGGC GCAATCTTGG CTCACAGTAA CCTCTGCCTC CCGGGTTCAA GCGATTCCCC  
CGCCTCAGCC TCCCGACTAG CTGGGACCAC AGGCACGNAC CACCACGNCC GGCTCACCTT TGTATTTTAA AGTAGAGATG  
GGGGCCTCAC CATATTGGGT CAGGCTGGGT CTTCAATCTN CCTGGACCTC ATGNTCCACC CGCCTTGGGC CTNCCAAAAG  
TGCTTGGGGA TTANAGGGAA TNGGGCCACC GGGGCTTGGG CCAAT

SEQ ID NO:1687: (Length of Sequence = 170 Nucleotides)

AAAAACCAA TAAAGCAATA ACTTTAAAGA CCTCAGACAC ACACAGTATA AACACCTGGG TAAGGTTTTN TCCGTGTCCA  
TGTTGACACC GGAAGTACCG TTAAAGTGCA AGTTTTGTIT TGTGTTCCTT TGTGCAGTTT CACTCACATG TAAACAAGTC  
ACTTGGCTAT

SEQ ID NO:1688: (Length of Sequence = 386 Nucleotides)

AATGTGATTT GATGTTAACA CTAGAGAATG ATGACTGTAG AACATTTGAG CAAGTAAAT AGTAAAGCAC ATAGTGAGTG  
TATGTCCATC TAACTGGTAC ATTGATAATT TAGTTTGGGC ACATAAAAGG AATATTTATA TGGCTTCCCA AATGCAGAGT  
TACATCTTAT TCGTGTATTT CTCTGAGTAT TTATATCCCG TCTCCTTTTT TCATTCTTAA AAATAAATGA ATTTTCACCTG  
TTGGCACATA TGAGGCTTAA ATATAAGGAG CATAACACTT GCATTCTAAT TTTTGCATAT ATTGTAAATG TGTCTGGTAT  
TTACAGCAAA ATACTGTGTA TCCTTTATGG GTAAACAAAG TGACATTGCA TGCAATGTAAT GTGATG

SEQ ID NO:1689: (Length of Sequence = 400 Nucleotides)

CTTCTGTGG ATCAGCGTAT TCCTAGATTA GGAATTCAAA TTAATGAAAA TTCACATATG AAAGGAAAAT CCATTGCTAT  
TTCTGGAGAG GACCTCAGTC CTGGCTTTTT CCCTGGCATT GCTACCTGGG TGGGTGCTCA CCCTCAGGT GCTGGTGTG  
GAAGGCAGGA GGAGGAACCT GAAATCCTGC CGATTAAGGC TAATTAACAG GGTTTAGGTG CCTAATTATC ATGACTCAGC  
CCGGGACTTA TGGTTAGCOG TGCAGGCCAG GTGAGTCTCT TATGGACTTC CTCTCAGACT GCTCTTTCTC ATTTTGTCTT  
GATGAGATAT TGACAGTCAT GTCCACCCGC TTCCTCATCC ATTTCCCGTC TTTGGGCCCT GGGAAGTACG GGGGCCTCTG

SEQ ID NO:1690: (Length of Sequence = 337 Nucleotides)

AGTATATAC CTTTAAAAGT AACTAATGCA ACTGCCAAN AGGGACAGTG TCAATATCAT TGTNTTCATT AGAAGGACGG  
CTGCCCCACA CTGTNAGAAC ACTGCTGTTT CTAACAGTAG TTTACTTTNA GAGGGATGTA AGAATTAGTT TNACCTTAAT  
TCCAGATGTG CATGCCCTCA AAGAAAAATC CCATTCTCCT TCCTTTTGGG GAGCACTTTT GGTGGCACCA AGGCTGGTGT  
GGGGTAGTGG AGAGAGCACT GAGCTTAGAG TCACAACCAG ATGAAACTGC TCTGGTCTTC ACTAGCTGTG TGACTTGGGC  
AAGCAGCTTG CAGTCTC

SEQ ID NO:1691: (Length of Sequence = 372 Nucleotides)

TCATTCTCCC AAAGTGCTGG GATTATAGGC GTGAGCACGT GCGCCAGCC TTACTTATTT TTAAATCAGA TTTTTTAATC  
AACTAAAACA GCTATGAGTT AAGTACCTGC CCTGCAAAA TTTTTAGAAA AAGTTTTAGG ATTATGAAAT TAAGAATTAT  
TTTCTTAAC TGGAACAGTT CTAAAATTTA TCTGATACTT CTCTAACAAG TGAGTGATCT CATGTAACCC CAGTTTGTAT

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CTTAAAGGCT GCAGCATAGA ATTGAGCTGT ATAACAGTGT TAGAACTGTC AAGTGATAAT CACAGAACAG TTTGTATCGG  
TTTATAAATT CTCATGTCTT GATCAGATCT GAAGGGAATA GGCATACCCT CC

SEQ ID NO:1692: (Length of Sequence = 360 Nucleotides)

TTTTTTTGGC AAAAATAGTA TATATTATT ATGTACAACA TGTATTTTGA GATATGTATA CATTGTGGAA TGTCTAAATT  
GAGCTAACAA ATACATTATC TCACATACCA TGTTTTTTTG TGGTGACAAC ATTCAACAAT ATAGACCATT TCACAAATTT  
GCATGTTATC TTTGTGCAGG GGCTATGCCA ATCTTCTCTG TATTTTINCA ATCTTGGTGT ATGTGCTGCT GAAGCACACA  
CCCTAATTCC TTTCAATTTAA GGTCTAGTT AACCTTCTC TTAAGTATAA CCATGTATTT TGTTAAGCAA TATCTTTTAA  
TTACAAAAT GCCATTTTTT TCTGGNTAGG AAAATTGATT

SEQ ID NO:1693: (Length of Sequence = 378 Nucleotides)

GACAAAAAGA GGGGTCTGGC TGCCGATGTG GAAATTTGTT TTTGGACTT CACCGTTACT CTGACAAGCA CAACTGTCCG  
TATGATTACA AAGCAGAAGC TGCAGCAAAA ATCAGAAAAG AGAATCCAGT TGTGTGGCT GAAAAAATTC AGAGAATATA  
AATTACTTCT TGTGAAGAGA CTGAACTTT GTTTTTATTT TAATATATCG TAGGAAAACA TTAAAGAGCA GATGCATGGC  
CATTTTNCCT TGATGTTCTC CAGAGTTTAA CATTACACTT GTCTGTCTTA TAATTGATAT TTTAGGGATG TTTGGGTGTT  
TGTTACAGGC AGAATTGGAT AGATACAGCC CTACAAATGT ATATGCCCTC CCTGAAA

SEQ ID NO:1694: (Length of Sequence = 362 Nucleotides)

AATGCACTTT ATTGGCTCCC AGGGAGTGGG ATGCAGGATC AGAGTGGACA CGCGCAGGGG GCTGGTGTGG GGAGCAAAGC  
NCCGGGCCTG CCCCAGACCC TGGTTTCCCT GAGGACCAAC GTGAATGGGG GCCCCTGAG AAAGATGCTT GGGGCTGCAG  
AGCGGATGGA ATGCAGGCC AGGTGCTGG GTGGTGCCT CAGCTCTGG CAGGGTGGAC GGGTGGTGGC CGCTGGGCTC  
TGCCAGCCGA TGGTCCNCTG GCACCTGATC CTGTCTTCCA GCTTCACTTC CGGGCCTGCT CGTAGTTGTC AGTGAACCAA  
GCACAGGTCT CTTGACCGN CTGCTTTNAA GGGTGTGAAN CG

SEQ ID NO:1695: (Length of Sequence = 411 Nucleotides)

TTAATACAAG GGGTTGAAC TGGACATCCT AATGATGCAA TTACGTCATC ACCCAGCTGA TTCCGGGTGG TTGGCAAAC  
CATCGTGTCT GTCTGAGAG GCTCCACAAT GCCACCCGC ATCGCCATTC TGTAGTCTTC AGGGTCAGCT GTTGATAAAG  
GGGCAGGCTT GCGTTATTGG CTTAGATTTT GCTGCAGATT AAATCCTTTG AGGATTCTCT TCCTTTTAC CATTTTNCIG  
CGTGCTCTCA CTCTCTCTT CTCTCTCTAG CTTTTTAATT CATGAATATT TTCGTGTCTG TCTCTCTCTC TCTCTGTGT  
TCCTCCAGCC CTTGTCTGG AGACGGTGT TTCTCCCTT GCCCATATC TTTCAACTC CCAGGGCTAC CCATTTCAAT  
GGTGGTCTG T

SEQ ID NO:1696: (Length of Sequence = 280 Nucleotides)

CTTTGTGATG TTTTACGCT TTACAAAAG CAGATTTGGT ATTCAGAAA GCCTGCAAAT ACAACATTGC TTAAGAGAAC  
CTGTAAACAC GTTTGGAATA CAATGCAACA CAAGTCAGCA AGGACAGGGG TAGGTCCAAA GGAGCCAGCT AGGGGGAAG  
GTGACAGAAA AGGAGAGGGA AGGATGGNGA CAGACATCAC CTGTGGTCTC TAAGGGGGCC NTGTGTTTAA TTTATAAGGT  
TTNCTNCCCA CAGGAGTCT NNTGTGATCT ATCCGTTTAT

SEQ ID NO:1697: (Length of Sequence = 418 Nucleotides)

ATTTCTTCAT TTACAAGAGG AATATATTTG GCTTCTCTCT TAAGACTCTG AGATTCACAA TCAGCAGCTC TAAAAAATAA  
AGGAGCAGTT TGGCTTCCGG AAGGAAGAGG AGGCAACACT CGGACCTGGT TCTTGTACAA CAAGAAAACA TCCTGGGGG  
CCCCTGAGG CTGGAGTGGG GGTGGAGGCT GGTCTTTGGA GGATGCCACC CCCACCCCAT CCTCTGTCA GGCCCTCGGG

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GTACCCAGAG GCTTNGTGGG TGAGTATTCC ACCTGCTTAC ACACCACTGA AGCCACAGCC AGCCAGTAAC TAAGGGGCAA  
GAAAGAGCAT TGTCCAAGCT GGCTCTTNG GGGGGTCCCC CATNGGCCA CAAAGGCCTC ACCCCCCACC CCATCCCCGT  
AACCAGAAAC CACCTTGA

SEQ ID NO:1698: (Length of Sequence = 376 Nucleotides)

ATTTTATG TTTATTTACT TATTTTITAC CCTTTTITCA AGAGATGGGG TCTCACAGTG TTGCCAGGC TGGACTTGAA  
CTCCCACTCC TGGGCTCCAG CAGTCTCCT GCCTCACCTT TCCAAGTAGC TGGGGCTATA AGTACACACC ACCATGCCCA  
GCAATATTTT AATTTCTGTA ATGTGTCAIT TAGCCAGTGA TTGTGTATT ATAATAGAAT CACAGAAATG GAGGGACTCC  
TAGAGGTAAT CAAATCTGGT GGTTTTAAAG CCTTTTATTC CCTCTAAAGG GATAGTAAAA CCATTAAAAA TATAATTTTT  
CCCAATTATG TAAGCCAGRG AAAGCTGACC TYCTGGTTTA GAGAGGAACA CAGATG

SEQ ID NO:1699: (Length of Sequence = 365 Nucleotides)

GGTACATGTG CACAACGTNG GNGTTTGTTA CATATGTATA CATATGCCAT GTTAGTGTGC TGCACCCATT AACTCGTCAT  
TTAGCATTAG GTATATCTCC TAATGCTATC CCTCCTCCCT CCCCCTACGC CACAACAGTC CCTGGTGTGT GATGTTCCCC  
TTCTGTGTG CATGTGTCT CATTATTCAA TTCCACCTA CGAGTGAGAA CATGCTGTGT TIGGTTTTTT GTCCTTGCGA  
TAGCCAGATG CAGCTACTCT TAATGTGCAT ATTTTCATCC TAGAACATTG GAGAGTTCCT GTAAAAGCCT TGTGTTCCAG  
GAGGAAGGAG ATCTGACCC TTCTGCTGAT GGCAGCAGTC AGGGG

SEQ ID NO:1700: (Length of Sequence = 397 Nucleotides)

AAAGGCAGTC AAGCAGGAGT TAAACAATAT GGACCTAACT CTCCTTATAT GAGAACATTA TTAAATTCCA TTGCTCATGG  
AAATAGACTT ATTTCTTATG ATTGGGAAAT TCTGGCTAAA TCTTCCCTTT CACCCTCTCA GTATCTCCAG TTTAAACCT  
GGTGGATTGA TGGGGTACAA GAACAGGTAC GAAAAAATCA GGCTACTAAT CCTGTTGCTT ATATAGATGA AGACCAATG  
CTAGGAAGAG GTCCAAACTG GGACACTATT AACCAACAAT CAGTAATGAA AATGAGGCTA TTGAACAACCT ATAAGGCTA  
TTTGCCCTCAG GGGCCTGGGA AAACATTGAG GACCCAGGGA ACCTCATGCC CTTCCTTTAG GTTCAATCAG ACAAGGT

SEQ ID NO:1701: (Length of Sequence = 245 Nucleotides)

GTCTAGGAGG AGGCCTTCTG CACAGAGCCC CTGAAGAACA CAGGCAGAGG CCCCCCACTT GGCTTCTACC ACGTCCAGAA  
CATCCAGTG GAGGTGACCA AGTCTTCAT TGAGTACATC AAGAGCCAGC CCATTGTTTT CNAGGTCTTT GGCCACTACC  
AGCAGACCCC GTTCCCGNCC CTCTGCAAGG ACGTGCTCAG CCCCCTNAGG CCTCGCGCC GTCACCTCCC TCGGGTCATG  
CCACT

SEQ ID NO:1702: (Length of Sequence = 349 Nucleotides)

ATCTGTTGTC AGCACAGTTT TATTTGCTGT GGAATCCATG AGAGCCGGAA GCATCGTTGG GGCCGTGGCT AGCAGAGCTC  
ATGGTGACCA GTCTGGGCC TGACCAATGG GTGATTACAT TTAAAAACCA AAACAAAACA AAACAAAATA CCAAGAACAG  
ATCACTTGCC ATGGACATCA GTAATCTATT GGTAAATGGTG AAAATTTTAT GAAAATTTCC CCTAAACCAT AACAAAACT  
GTCTCTCTTA CCCCAAAAGT GCTGGAGGGA AAGATGGTTG CATGGCTTTG ACCTCTCTTT GAACCTTGAA TGCTACCTTC  
CTACCCGGAA AATGCGGCAC ACTATACTT

SEQ ID NO:1703: (Length of Sequence = 419 Nucleotides)

GAGCCCTGC CTCCAGAAG CTCACATCCT CTTACTCATG GCAGACAAAT AAACGTGAAT TACACTGCAG GGAGGTAAGT  
GTGGCAGCAG ATGTAGTATG CAGTGCAGAG GTGGCCATGG TTGCTNAGGGC AAGGAGGGCT TCTAGCATG GCGTTTATTT  
GACCAGAGGC TGGCGGTGGC TTTTGCTAGC AGTGTGATTG TNATCTGAGC CAGGGACAGA TACCTCTNTG AGCCTTGTTT

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TCCTCATCTG TAAAGTGGTT AAAGACTGAN TAAAGCAAAA TATGTGCAAA CAGTCTGTGA ATGGGGAAGT AACAGATGTT  
GCTTCTATT ATGTTCTCTC CTAGCCATGA ATATCAATTA TTTCAGAAAT GAAAAGGGAT CCTGCACCCA ATTTCAAATC  
AAGCAAGTTC ACCTAGAGG

SEQ ID NO:1704: (Length of Sequence = 372 Nucleotides)

GCTTCCCGAA GGTCTTGGAC GAGCGCTCTA GCTCTGTGGG AAGGTTTTGG GCTCTCTGGC TCGGATTTTG CAATTTCTCC  
CTGGGGACTG CCGTGGAGCC GCATCCACTG TGGATTATAA TTGCAACATG ACGCTGGAAG AGCTCGTGGC GTGCGACAAC  
GCGGCGCAGA AGATGCAGAC GGTGACCGCC GCGGTGGAGG AGCTTTTGGT GGCCGCTCAG CGCCAGGNTC GCCTCACAGT  
GGGGGTGTAC GAGTCGGCCA AGTTGATGAA TGTGGACCCA GACAGCGTGG TCCTCTGCCT CTTGGCCATT AACGAGGAGG  
AGGAGGATGA CATCGCCCTG CAAATCCACT TCAACGTTCA TCCAGTCTT TC

SEQ ID NO:1705: (Length of Sequence = 426 Nucleotides)

GATGCCTTAT TTAGTCCATT TGGTGAGGTA ATGTTTTCTT GGATGTCCCT GATGCTTGTA GACATTTGTT GATACCTGGG  
CATTAAAGNG TTAGGTATTT ATTCCAGTCT TCACAGTATA GGCTTGTTTT TAGCCATCCT TTTTGAGAGG ACTTTCCAAG  
AATTCAAAGG GGATTGAGTG TTGTGACCTA AGCCTATGGT CACTGCAGCC ATTTCAACAC TAGAGAGTGC CTAAGCCCC  
GGAATGCTGC AACTCTTACA GACTCCTTGA TACACAGCTT TGGTAGATTT TGGGAAAATA AGGGAGAATT CCGTGGGGTT  
ACCAGGTAAA AAGTCTCTCC CACTTCCCTC TCTTTCTGGC AAAGGAAGTC AGTCTCTGCA CCAGGCTGCC TGGAGTTTGG  
GGGAGGGATA AGGCGGTCAC TCTAAT

SEQ ID NO:1706: (Length of Sequence = 412 Nucleotides)

ATTTTATTTT CTTACATCGA AGAAAATGTT AAAGAGTATC TNCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT  
CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCACCTG GATGGGGCTG TTCTATATCC TGCAGCATCT GGAATGGAG  
TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTCTGG CAGATGTCCC TGGTTCGAAA GACCACTGCA  
CTCAAACAGC TGCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTTCTTTG CAGATGTAGT  
TCCAGCAGTC AGGAAGTGGA GAGAGGCCCG AATNAAGGTG TACATCTATT CCTCAGGGAG TGTGAGGCA CAGAACTGT  
TATTCGGGCA TT

SEQ ID NO:1707: (Length of Sequence = 434 Nucleotides)

GTGTGTCTGC AAAAAAAAAA AAGATTCTAG GCATGGTGGT GTGTGACTG TAGTTCCAGC TACTCCAGAG GCTGAGGTGG  
GAGGATTGGT TGAGCCTGGG TGGATGAGGC TGCACTGACC CATGATCATG CATGGGAGAC AGAGCAAGAC CTTGTCTCAA  
GAAAGGAAAG AAATCACTGG CTCTTCTGTA AAAAAATGATC TGTTAAGAGT AATTGAAAAA ATAAATACAA GTAATAAAT  
AATCTTTTCA TTAAGAAATA CTACCAAAT TAACATGGAG ATCTAGCAA AAGTCAAAG CAGCTNGGCG TGGTGGCTCA  
CACCTGTAAT CCTACACCT TGGGGAGGCT GAGGCGGGAG GNTCGCCTGA GTTCAGGAGT TCGAGACCAG CCTGGCCAAC  
AGAGCCAAGT CTCTACTTAA ATACAGATTA GCTT

SEQ ID NO:1708: (Length of Sequence = 440 Nucleotides)

GGACCAGGAC TCCAGCACCT TCCCTGGCTG CATCAACAAT GCCACACTCT TTCAAGATGA GATAAACTGG CGCCTCAAGG  
AGGGACTGGT GGAAGGCGAG GATTATGTG TGCTCCAGC AGGTGCTTGG CATPACCTGG TCAGCTGGTA TGGTCTAGAG  
CATGGCCAGC CACCCATTGA ACGCAAGGTC ATAGAGCTGC CCAACATCCA GAAGGTGGA GTGTACCCAG TAGAACTGCT  
GCTGTGCGG CACAATGATT TGGGCAAATC TCACACTGTT CAGTTCAGCC ATACCGATT TATTGGCCTA GTATTGCGCA  
CAGCTCGGGA GCGGTTTCTG GTGGAGCCCC AGGANGACAC TCGGCTTTGG GCCAAGAACT CAGAAGGCTC TTTGGATAGG  
TTGATATGAC ACACACATCA CGGTCTCTGA TCGGCCCCCT

SEQ ID NO:1709: (Length of Sequence = 404 Nucleotides)

TTTGTCCTAT GTAGAATTGC CTATAGTAAG AAAACCCAGT AGAGAAAGTG GTTTNAGAC CATTCGGCAG CTGCTTTGGA  
CACCTGGAGC CATTTCCTTT ACAGATGAAG ATGCATTGIG TCATTGTCTC AGGATCCTCG TCTGTGCT TCTCTGGCCA  
CAAATTGTTT TTTACCAAAG ATGATTTTAT TTCACTGTCT TTGAAAATCA TTCCTTATAG GTAGAATATG AAGATTCTCT  
GAAATGATTC CAAAATGCCA AACTCAAACA CTATTGTCCG ATTTCTTTAC TTGCAACAAG AGAGTAGAAG GGACAGTATT  
TGTTTTGTGA TGTTGGGGCG TTCATCAGGG AGAGAATTG AGATAAGTAG GAATAGCAAA TAGGAATAGT GAAATAACCT  
AGAT

SEQ ID NO:1710: (Length of Sequence = 187 Nucleotides)

GGTGATCTGC CGACCAGAGG CCTTAAACTC TGGTGTGAG TACTACTGGG ACCAGCTGAA CGAGACGGTC TTCCTGTCC  
ATTCCAACAG CAGGAGCAGC GAGCGCTGG ACCAGGCAGA GCACATGGAG GACAGCAGAG ACATGGGCTG ATGAATGCAT  
TGGGCTTCAG CCGACCTGCA CTCAGTG

SEQ ID NO:1711: (Length of Sequence = 313 Nucleotides)

AGGGGCATGT NATCATTINA ATGATGINAT CTTTGGTGT TCCCTCATTA GCTGTAGACT ATCCCTCTC CTCACCAC  
AATGTTCTA TGATGAGTTA CAAACAGAAA GGAAATCACA TTTTCATACT AAAACAAAA TGATCAGAGC CTGATTTCT  
CCACTAGAAA CTACACGTAC AGTTAAGAGT CCACATGCAA CACCTTAAAT CACAGACTGA GGACCTCACA TTCTGACCTG  
GGAGTCTCT CCCCTTCCCC AGCCTTGGGC TAGCTTTGGC CTAGGCTCAG GTAATACTGA CCCCCACAGG CGT

SEQ ID NO:1712: (Length of Sequence = 202 Nucleotides)

TTTTGGTGGT TTCTCTTTA TTGTGTGCCT CCTACCTTCC CCCACAATT CAGTCCCTTC CAACACCCCA AAAAGAAGGA  
GTGAAAGGAA GGGATTGCTG GGGTCTGAG CCCTTGGCAG TCAGAAGGAC AGAACCAAAC ATCACTGGAT GTGACACAGC  
TGCATCAAGA AGTCTACAGC AGTATGGGAA GCGGCAGAGA AG

SEQ ID NO:1713: (Length of Sequence = 253 Nucleotides)

TGATTCANTG GGTCTGGGAT AGAGTCTGGT ATTCTGCATT TCTGACTAGC CTCCAGGTGA TACTGATTCT CCTCATCTAG  
GGACCTCGCT TTGAGTAGCA AGTGTTTAGG CCACTTACTA GCAGGAATA AGCACAGTAT CCTACAACAG CAAATGTCTT  
TCCAACAAGA AAGACGAGAG CAAATNCTGA TGCCACATCT GCACTGCCTC AGAAAATAAA GAAGGGATGA GGAGCCCCC  
AGTGGCACTC TGT

SEQ ID NO:1714: (Length of Sequence = 299 Nucleotides)

GGTGCAGCTG CTTTGAAAAA TGACTTGGCA GCACCTCAA ATGTTAAACA GAGTTACCAC ATGACCCAGT AATTTCACAC  
TTAAGGATAT ACTCAAGAGA AATGAAAAC AAAAACATAC GGCTACCCAA AAACCTACAT AAGANTGTT ACAGCAACAT  
TATTCATAAT AACCAAAATA TGGNAACAAC CACAATGTCC ATCAATTGAT AAMTGGGTAA AGTCTGGCAA ACTCAGRA  
TGGRATATTA TTTGGTGGTA AAAAGGAGTA AAGAACTST ATGTACTACA ACATGGGTG

SEQ ID NO:1715: (Length of Sequence = 371 Nucleotides)

TTTTTTTTTAC CGGGGCGTTC CTGAGTTTAT TTGGGGCACA CCGGACGAG GGCCCTGCAC CTAGAAGAAG GTGTTGGGCC  
TCTTGGTGGT GAAGCGTGGC TTGTGCTGAC GGCGCAGGAC CCGGTGGGGC AGCGGGAAT TGATCTTGA GTCTGGAAC  
TGCTTGACAG CCGGCCGGCG GCACCTGCTG GCGCGATCT CCTCCACCT CATGATCTGA ATGGAGTGGG CTCGGGCGCG

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GTGCCGGGCA CCCATGTCCTC GGTAGCACTG GGTGACAGCG CTGCGGTGG TCAAGTCCCG GTATTCCCGG TACATGTTGT  
GGGTGCCGCT CCGGGAGTCA TAGCGCAGCA AGATCCCGAA GTTCTTCAAC C

SEQ ID NO:1716: (Length of Sequence = 265 Nucleotides)

GTGCAGAATC TGCTCCTGGA CACCCACAGG GGGCTGCTGT ATGCGGCCTC ANANTCGGGC GTAGTCCAGG NGCCCATGGC  
CAACTGCAGC CTGTACAGGA GCTGTGGGGA CTGCTCCTC GCCCGAACC CCTACTGTGC TTKGAGCGGC TCCAGCTGCA  
AGCACGTCAG CCTCTACCAG CCTCAGCTTG CCACCAGGGC GTGGATCCAG GACATTGAGG GAGCCAGCGN CAAGGACCTT  
TNCAGCGCGT CTTGGTTGT TTCC

SEQ ID NO:1717: (Length of Sequence = 350 Nucleotides)

CAGCCCCCGC AGCCCTCTGG CCCCCTCCAT CTCTGTCCG TTCCACCCA CCCCCTCCT CGGCCGAGC CTTTTCCCGG  
TGGGTGTCAG GNTACTCCC ACTAGGGACT CTGCGTAAT TACCTGAGCG ACCAGGACTA CATTTCCAA GAGGCTCTGC  
TCCAGGAGTC CAGGAAAGAC GAGGCACCTT GGCGCGGGG CTGCTGGGA CTGTAGTTG CCTAGACAGG GCACCACCT  
GCACTTCGG ACCCGCGCTG GAGGCGCCGT GAGGTTTGGT GTCTGAAGC AGCAATTAA AAGCAAGAGG ACTTCATGAC  
CACCATGGAC GSCAATTAGG AGAAGATCAA

SEQ ID NO:1718: (Length of Sequence = 379 Nucleotides)

GACATGGAGA CTCACATGGC TGCAGAACAC TGTGAGTGA CTGCAAATG TAACAAGAAG TTGGAGAAGA GGCTGTTAAA  
GAAGCATGAG GAGACTGAGT GCCCTTTGCG GCTTGCTGTC TGCCAGCACT GTGATTAGA ACTTTCCATT CTCAACTGA  
AGGAACATGA AGATTATTGT GGTGCCCCGA CGGAACATG TGGCAACTGT GGTCGAATG TCCTTGTAAG AGATCTGAAG  
ACTCACCTG AAGTTTGTGG GAGAGAGGGG GAGGAAAAGA GAAATGAGGT TGCCATACCT CCTAATGCAT ATGGATGAAT  
CTTNGGGTCA GGATGGAATC TGGATTGCAT CCAACTCCT CAGACAAATT GAGGGCTCT

SEQ ID NO:1719: (Length of Sequence = 197 Nucleotides)

CCTATATTG TTTAATTAT TTAAGACCAC CTCCTTACAA CTTCAGAGA GAAAATACAA AACAAGAAAC AGACTTGGTT  
TCAAATGCAT AACCAGGTGC TGGAGTTTAA AGCATTACTG ATAACATTGT TACAGAAGAA TGGCAGCTTA CTCCAGGGCA  
CTTCAGTATT CTGAGGAAT AAACATGATT TCGGAAG

SEQ ID NO:1720: (Length of Sequence = 203 Nucleotides)

GAGGGCCGGG CAGAGGGAGC ATGACGGGGA GAGTGAGGAG GAAAGAGGAA AGGAAGGCCA GGGTGGGAGG AAGGATCANC  
TAAATCTGAG GGAAGAAGAA GGAAAGGAGA GGGCCTATTT CATAGCAGAT GCAAATRAAG GGNCTGGGG CTAKTCAGGA  
AGAAAGGGAA AGGGAAGGAA GGCAAGAGAG AGGGGTGAAG GGA

SEQ ID NO:1721: (Length of Sequence = 326 Nucleotides)

GGTGCAGCGA TGTTTAATGG CAATTCGTAT AAACCAAGCC CATGCACAAG TAGAAAGTGC CGGTGGAGCC GGCAGGAGGC  
CCCCGCCGCG NTAGAGAACC ACAAGCCCGG CCGTCAGCC CTCGCCCGG CGCCTTAAAT AGATTCTTCA CTATACTCTG  
TATGTTACAG TATGTACAAG ACCCTCCCC TCGGGGACG GGGCGGACTN CGCAACNGT TCCTATGTAC ACCACCTCCC  
CTTTCGGCCC TGAGGTCAGT GGCCAGAGTC GGGTGATGGG GTAAGANAGG GCCAGAGAGG GAGGAAACAG ACGCAACAT  
CGGGAG

SEQ ID NO:1722: (Length of Sequence = 291 Nucleotides)

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TGTTTTTAAA AATGAGAAAA TTTGGAGAGA GAATACTATT ATGTCAACGG TACAAGACTC TGAATCTTGA AGATGTAGAT  
 GGATATAATA TTTAGACTTT ATATACACCC ATAGATATGT ATTTATATAT GCATACGTTT TGTATAAAAT TACAATTGAC  
 TTTTGTATT CTCTTINCTG TCATTACAAG AATGAGATGG AAACCAAAAT AGTTGTNCCA TCCTCTTACC CAAAGAGGGA  
 TACTGAAAAG TCCGGTATGT GCATGCACIT GTTCTCTGG GGTCAAATCT G

SEQ ID NO:1723: (Length of Sequence = 369 Nucleotides)

GATTGCCCGC TCCCTCGATT CCTTCTGTGT GTCTCCAGAA GCTGCTGTGG GCTTGCTAAA AGGGACAGCA CTTGTCTTAG  
 CCCGATTACC TTTGATAAG ATTACOGAAT GTCTTAGTGA ACTATGTTCT GTTCAGGTGA TGGCATTGAA AAAGCTGTTG  
 TCTCAAGAGC CCAGCAATGG CATATCCTCA GATCCACAG TGTCTTGA TCGCCTTGCA GTGATATTGA GGCATACCAA  
 TCCCATTGTG GAAAATGGAC AGACTCATCC GTGTGAGAA GTCATACAGG AAATATNGCC AGTTTTTATC CGAGGACTCT  
 AAAATAAGCA CCGAGCTGNA TAATCGGATT GTAGAGCGTT GTTTCAGG

SEQ ID NO:1724: (Length of Sequence = 231 Nucleotides)

ATGTATIGTT AGTTCGATT CTTCAAATTT TATACATATT TACTTTCIGT TAAAGAGAAA AGGATAAAAT GGTATAAAAA  
 AAGATAAGC TATTAATTAA GCACGAGAGA GAAGATAAAT GGATATTTTC CTTGTGTGAG GCTAAGACAG AWGCAATCT  
 CGTTANGAAA AATGCCACCC ACACAACAGG AANTTTATCC AAAACAAAC AAAAGCAGTT ATAGANCCCC T

SEQ ID NO:1725: (Length of Sequence = 317 Nucleotides)

GTGCAGGGTA GGGTACATAT GGCTCTGTCA GAAGAATACC ATGATTTAAG GGAAGAAAGT ACACAAGGTA CATGGAGGGT  
 ACACAGGGAA AGTACATTA TAAACATGGA CGTGTGCAAA TAGGAAAGAC ATGACTCAGC ATGCTAGACA AATTGCACAT  
 GCCTACCCAA ACACGCTTA GGGCAGACCC ATGACCATGA GAGGGGCACA CGTAGCTGTG AATGCAGGGC ACCCGAGAGC  
 ACATGTKACT KAACATGAAG AAAGCATACG GGAAAAGCGT GKTACACAT GNGCATGTTT AGTGGGGCAC ACGCAGG

SEQ ID NO:1726: (Length of Sequence = 282 Nucleotides)

CTCTGAACC AGATGAGCAG CCACCGGAAA CAGAAGCAGA GAGAGCCGGA GTCCTGGGAA TCCAGGAAGT CGCAGAGCAG  
 GGGGTCCAGC ACCCTCAGGA GCAGCAGCAG TCGCCCGAKT TGCCGCTTCA TGGTCTCCTG GCTCTCTTCA AAGTTCCCTT  
 GCACGAGCTC CATGAAGCCA CAGAAACACC AGAAAGCATC CACCTCGTTC TGAATGACGT AGAGGATCGG GGAGAGAAGA  
 TCACTCATGC CTTGGACGTA GCGAGGTG AAGTGATACA TT

SEQ ID NO:1727: (Length of Sequence = 285 Nucleotides)

GAGTATIGAT TTCAGGCAGG ACCCAGGTCC CAAAATGTTA GAAACAGTTA TCCTTTTTC CTCTGAGTTC GTTATTCTCT  
 GGGGCCCCAG TATCCGTGGC TTAACAACCC GGCTGGATAG AAGGCACCTC TTTCCCCACG TTCCAACAAG ATCCCAGAGC  
 TGCTTCTCAT TGGCTCGTCC CTGAGTCAGT CACACTGGAC CGGAAGGTGA AAGGCCCTCA TTGGCCAGNC CGAGTCATG  
 TGCCACCCCC TGGGGATCCA GCTGTGGGNC TNCCTTAACA GCATT

SEQ ID NO:1728: (Length of Sequence = 394 Nucleotides)

TTTTTTTATGAT GAGGAGATAT AGCAAAGGGT CATTTGCCCC TCCTTCAGAA AACTTTTCTC CAAATCTCCT TTAAACATAC  
 TGCCCTATCT TTCCCTCCAT AACTCCACCA GTCTCTCCAC ATCCCCCTCC AAATCTCTGT ATACATAGGC AAGAGAGGGC  
 GATTCCCAGC ACAAGTCTAG TCCTGGGCGA AACTTCCATC TCTTTCTCG CATACCTCCT GTCTGGGTAT GGGGATAAGG  
 GAGAGTATGG GATTTGTGTT TCCATTACAT GCTTTTTCAA AATTTCTGTA ATATGTGGCA CTTATAAAAT CAGAACAGAC  
 AAAATGATAT CGGGTAAAC ATGCAACTGA GAGCAATTG GGGAAAAATC CTCAGGNCAC AAAATGTATT ACTG

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SEQ ID NO:1729: (Length of Sequence = 301 Nucleotides)

GGAAGTTAAA GTATTTATTG ATGTGTTTAA ACTGTGTACA TTCTCCACAG ATCATATTAA GNGTITTKTA GKGGAAGTTT  
 AATCTGTGCA TAGTGGGTAG YGACATGAWT AGGGTCAAAG GGGAGGYAAA AGGAAAAAAA CAAAACAAA ACAGTCACAG  
 GAAAWTAAAA ATACACCMCA GGTIACCAGA ACCTTCAGGT TTAAAAATAA ANGTAAGNAA AAGCAGAAGC AGTGAGCATC  
 GGCATCAACC TGTACAAGCA TTACAAAAGG CTCCTGTGAC GGAAACACAA TTGTTCAAAG G

SEQ ID NO:1730: (Length of Sequence = 312 Nucleotides)

GACGRACGCT CTGCCACGC CCTGAGCGTG TACACATGAT GTNTTCTATG CATTCACCCT GCCCCCAGC CGCCCTGCA  
 GAGGACAAGA TGGGTGGCCC CGGCTCCCTT TCCCTAACC GCCCCTGCCC GCTGTGCAGC CGTGTGCGTT GCGGTGTGTT  
 TCTGTGTAC TGGCGTGTCA CGTGATGTAG CCGTGTGTC TGACATGAGC CCCTGCCCCC TTCTGTGTTT CTCGGTGTGT  
 TTCTAGAGCT CTCTCCCTCC CTTCTCAGA GGGACAGGA CTCCTGGGGT CTGGCTCGG CCCAGAGCCA GG

SEQ ID NO:1731: (Length of Sequence = 392 Nucleotides)

ATCGGCTATG GGTTCGGTG CGTGACAGAG GAGTGCCCGC TGGCAGTCAT CGCTGTGGTG GTTCAGTCCA TGTGGGCTG  
 CGTCATCGAC TCCTTCATGA TTGGCACCAT CATGGCCAAG ATKGCGCGC CCAAGAAGCG GGCGCAGACG TTGCTGTTC  
 GCCACCAGC GGTATTTTCG GTGCGGACG GCAAGCTCTG CCTCATGTG CGCGTGGCA ACCTGCGCAA GAGCCACATT  
 GTGGAGGCC ACGTGCGGC CCAGCTCATC AAGCCCTACA TGACCCAGGA GGGCGAGTAC CTKNCCCTGG ACCAGCGGGA  
 CCTCAACGTG GGCTATGACA TCGCCTTGA CCGCATCTC CTGGTGTGCG CCATCATCAT TTTCACAGAG AT

SEQ ID NO:1732: (Length of Sequence = 352 Nucleotides)

GTACCTAGTA CCTAGATAA AGGGAATGT GTGATTCTTA ATGAGCTTAA AAAGGAAACA ACTTCTTTTT TTTTTTTTTT  
 TTTTGTAGAC GGAGTCTCAT TTTGTCCCC CAGGCTGGAG TGCAGTGGG CGATCTCTGC TCACTGCAAG CTCGCGCTCC  
 CGGGTTCAGC CCATTCTCCT GCCTCAGCCT CCGAGTAGC TGGGACTACA GGCTCCACC ACCACGNTG GCTAATTTTT  
 TGTATTTTWA GTAGAGACGG GGTTCACCG TGGTAGCCA GGATGGTGTG GATCTCTGA CCTCGTGAT CCACCCACCT  
 CGGNTCCAA AAGTGCTGGG GATTACAGGC GT

SEQ ID NO:1733: (Length of Sequence = 321 Nucleotides)

TTTTTGTGTT GTTGTGTTGT TTGTTGCAG AGTCTTGCTC TTGATCTATC TCCCAGGCTG AAGTACAGTA GTGTGATCTC  
 GGCTTGCTGC ACCCTCTACC TCCCAGGTTT AAGCAATTCT CATACCTCAG CCTCTGAGT AGCTAGAACC ATAGGCACAC  
 GCCACCATAC CTGCTAACTT TNCIATTTTT AGCAGAGACT GGATTTTGCC ATGTTGGCCA GGCTGGTCTC GAACTCCTGG  
 CCGCAACTGG ATCTGCCCAA CTCAGCCTTC CAAAGTGCTG GGATTACAGG CATAAGCCAT TCATGTGCGG TTKTTCAACT  
 G

SEQ ID NO:1734: (Length of Sequence = 208 Nucleotides)

AAGTCAACGT ATCTATTTTT ATTATGAAAC ATTAAATTTT GACACATTGC CTCATTGCT TTTTAAAT CTATTATCTG  
 ACTTAAACCT ATTCAGCAAA AATGCCAATA AATTATATTA ATCATACTTT GGGTCTTTTT AAAACTAGGA ACATAATATG  
 TTTTATGATA AACAATAATA CTAAATCTGA GTTGTATGAA CTGTTAAC

SEQ ID NO:1735: (Length of Sequence = 347 Nucleotides)

TCTATTACCT GTACAGTATG GTTTATACGT TGGTGAATTT CTAAGGGGA AGCGGCCAG GGAGCGAGCC CAGAACGGAC  
 CGGACGCTG TNCACCCCCA GCCCTGCCCC TTGGCCGAG AGGCTCAGC CCTGGGGAGG GAGGGGGCAC TGGTGCCCCC  
 AGCCTCTCCA ACCCCCCAAC TGCTGCTGCG GGAACCCCC CCCACCCGC CTTGAGAGCC CTCCCCCTTG GACTAGAGCG



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GCTGGGCAGA GCTCTAAACA GGGGCAGGGG CTCTCTGCC AGCCTGTGGG CATGGCAGTC ATTCTGGAA GGGGCAGGAC  
CTCCGGCCTT GTCCATTTCG GGGGGAA

SEQ ID NO:1736: (Length of Sequence = 356 Nucleotides)

GACACAGGGA GGGGAACAAC ACACACTGGG GCCTGTTGGG GAATGGGGGG TGAGGGGAGG GAGAGCATCA GGACAAATAG  
CTAATGCATG TGGGGCTTAA AACCTAGATG ATGGGCTGGG CGTGGTGGTT CACGCCTATA ATCCAGCAC TTTGGGAGGG  
TGAGGCGGGC GGWTCACGAG GTCAGGAGAT CAAGACCATC CTGGCCAACA TGGTGAAACC COGCCTCTAC TAAAAATACA  
AAAATTAGCC AGGCATGGTG GTGCGTGCCT GTAATCCAG CTACTCAAGA GCCTNAGGCA GGAGAATCAC GTGAACCTGG  
GAATCGGAGG TTGCAGTGAG CCAAGATCAT GCCACT

SEQ ID NO:1737: (Length of Sequence = 324 Nucleotides)

TGTTTTCTAA TGATTTTAA TTTTTCAGAG GAAAAATAATT TCAAGAAATA AAACCTAATT CCCCTGAGTC CTTATTGAAT  
TAAATATTGA AAAACAATGA ATGAATGATG CATTCTTATT AATGGACTGT AAGAACTGA TATAATGGAC TTCATTCTAC  
AATTCGGTTT CTTATTGTCT TACACATGCT CCTCGAACTT AAACATTTTA GGACCTTAAC ACCATTTCCT TAGTACAATT  
ACTAAAAGAA AGCTTTGGAT AATATAATAT CAGGGAAGAT AGTACAACAT AGTGAAGGAT GACATAGGGA AGATGTGAGG  
AGCA

SEQ ID NO:1738: (Length of Sequence = 316 Nucleotides)

GGCACCCCTGG GCATGTCCAG CCTGGAGCAG CTGGAGCAGA ACTTGGCAGC AACAGAGGAA GGGCCCCCTGG AGCOGGCTGT  
CGTGGATGCC TTTAATCAAG CCTGGCATTT GGTGCTCAG GAATGTCCCA ACTACTTCCG CTAGGCCCAT CATGGCTCAG  
GCTGCCAAG GCTTTTNTGT CACCTCTTTT GTTCTCTCAC ACTGACCAGT CTTGGCCTTA AGCTGACTTA GAAGGGTTTT  
TCTGAATTGT CTAGATCCAT GCATTATTTT TCTAGCTTCC TGCCTTGCTC CCTATTCACT TTACACTGTG AAAGGT

SEQ ID NO:1739: (Length of Sequence = 398 Nucleotides)

CAAAAACCAT CTCAGGATAC TGAGAAGCCT CTGGAACCTG TGAGTACTGT TCAGGTAGAG CCTGCAGTTA AGACTGTAAA  
CCAACAGACT ATGGCAGCAC CAGTAGTCAA AGAAGAAAAA CAACCTGAGA AAGTCATCAG CAAAGACCTT GTTATAGAGA  
GGCCTCGACC AGATTCAAGA CCAGCAGTTA AAAAGAATC AACTTTGCCT CCCAGGACCT ATTGGAAAGA AGCTAGAGAG  
AGAGATTGGT TTCCAGATCA AGGATACAGA GGTCGAGGCC GAGGTGAATA TTAATCCAGA GGGTCGAAGC TATAGAGGTT  
CTTTATGGGA GGGGCGTGGC AGNGGGTTGG TAGGGGGACA CACTTCGAGA TTATCCTCAG TATANGGGGC AATAAGCC

SEQ ID NO:1740: (Length of Sequence = 376 Nucleotides)

GAATAAATTC GCAAACTATG CATCTGACAG AGGACTAATA CCCAGAATCT ATAAGGAACT CAAAAATCA GGAAGAAAAA  
AAATCCCATC AAAAGTGGGC TAAGGACATG ANTAGACAAT TTTCAAAAGA AGATATGCAA ATGGCCAGAA AGCATATGAA  
AAAATACTCA ACATCCCTAA TTATTGGGGA AATGCAAATC GAAACCACAA TGCAATACCA CTTTACTCCT GCAAGAATGG  
CCATAATTTA AAATCAAAA AATAATAGAT GTTGGCGTGG GATGTGTTGA AAAGGGAACC ACTTTTACAC TGCTAGTGGG  
GATGNTAAAC TACTTCGGCT ACTATAGNAA ANCAGGATGG GNGGATTCCT TAAAAG

SEQ ID NO:1741: (Length of Sequence = 322 Nucleotides)

CAATGCAA AATCAAGACT TGTCTAAAN TGTATGTCCA TAGCCATATC TGTTTAAAT ACINTAACTN TATAGTAAAT  
CTTGATGTTT AATACAGCAA ATGTTAAACC AAGCTTTCAC TACAGAAATA AACAGAAAT TATAGGCGCT CATTATCCTT  
TTAGACAAAG TTGTATTTGC TTTGCTATTT TTTTGTGTTA GGNTTTKTGC AACTATTTCA CAAACAGENA CAWRATATT

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TAAATTGTTA ATAGAARTTT CCAGTTTTCT TTAGTCTCTG GCTACTCCAA GTACTGGTIG CTGTGAATGA CCTTTTCATG  
AG

SEQ ID NO:1742: (Length of Sequence = 322 Nucleotides)

CCCCCAGCC AGGAAAAAAA AAAAAGCTT TGAGGAATGA GAGAGGGTGA GATGGGTGGA AGAAGGTGCT GGGCAGCCAC  
GGGCGCCACG CCTCANTGGC CCCAATTGCC GAAGCCGATC TCTTGCTTGT ATCTGTTAGT GAGGATGTTG GCTTTGCGCG  
TNAGTTTGA GAGCACAGTG TGCAGCCCGC GCAGGTGGTA GTGGAAGTNC TGTTCAGGT CTTCTTCGCC GCGTCCGAA  
CCCTCCAAGT GGGCCAGGTC CACCAGGATG TCCTTGGGAC TTCCAGGCAC TGCCCTNCTC GNTCCCAAGC CGGTNGGAGG  
CG

SEQ ID NO:1743: (Length of Sequence = 250 Nucleotides)

ATGGGTAGGG GGCCAACGCA GTCACCGCG TCCGAGTCA CAGTCCAGCC ACTGACCGCA GCAGCGCCCT TGGTAGAGC  
CGCTTGAGC GAGAACTG AATTGCCAAC GAGCAGGAGA GTCTCAAGG GCAAGAGGAG GCCAGGGCTC GACCCACAGA  
GCACCCINAG CCATCCGAG TTTCCGGCG CCAAGCCAG GAGAAGCCG CCATCCGCA GGNCCGNGTC TTTGAGCGAG  
ACGNGAGTTT

SEQ ID NO:1744: (Length of Sequence = 247 Nucleotides)

GATGATTGAG TGTTTCTTA AAAATAAAAA CCCCAAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA GTGTAACAGG  
TTAGCCATTA ACACAGNATA AAGAWGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGKCT GGTCGKCCGA  
CGTCACAGTG GATGGCCCTG CGTGGCTGGG RCACAGACAG GNGCAGGCA TGGCACCTTT CGNCACCGAG AGCAAGCATA  
GGCTGTA

SEQ ID NO:1745: (Length of Sequence = 379 Nucleotides)

TTCTAAACCA GTTAATAAAT TCATTCCACA AGTATTTACT GATTACCTGC TTGTGCCAGG GACTATTCIC AGGCTGAAGA  
AGGTGGGAGG GGAGGGCGGA ACCTGAGGAG CCACCTGAGC CAGCTTTATA TTTCAACCAT GGCTGGCCCA TCTGAGAGCA  
TCTCCCCACT CTCGCCAACC TATCGGGGCA TAGCCAGGG ATGCCCCAG GCGGCCAGG TTAGATGCGT CCCTTTGGCT  
TGTCAGTGAT GACATACACC TTAGCTGCTT AGCTGGTGCT NNGCCTGAGG GCAGGGCAGG AAAATCAGAA TAGCATTGTC  
TTTCTCTGGG GCAAAAATGG GAAAGTTCAG CGGNGNCAG CAGGAATCAA GTGGGCATT

SEQ ID NO:1746: (Length of Sequence = 472 Nucleotides)

TTGATGCTGT CCCTTCATTG AATTTTAGAA TGATTGAAGA TAGTGGGAAA AGAGGAAATA CCATGGCAGA AAGAAGACAG  
CTGTTTGAG AGATGAGGGC TCAAGATCTG GNTCCGATCC GACTCTCCAC CTACAGAACA GCATGCAAGC TTAGGTTTGT  
TCAGAAGAAA TGCAATTTGC ACCTGGTGA CATATGGAAT GTCATAGAAG CATTCGGGA AAATGCTCTG AACAACCTGG  
ACCCAAACAC TGAATCAAC GTGTCCCGCT TAGAGGCTGT GCTCTCCACT ATTTTTTACC CAGCTCAACA AACGGGNTGN  
CAACCACTTC ACCAAAATCC ATGTGGAGCA GTCCATCAGN CTNCTNCTTA ACTNCTGCT TGCAGCGTTT TGATNCCGGA  
AGGCCATGGT AAAATTTTCA GTATTGCTT GTCAAAAANG GGTTTTAGGC NCCATTTGTG TGGGAGGGGA AG

SEQ ID NO:1747: (Length of Sequence = 351 Nucleotides)

AGGATCAGAA TACTTTAATA AGATACCACT GTCAAAATAC ATTTCTTAT AAGTTAAGC TCCATACAG TTATAATGTT  
GTCAGTAGGA ATTGACAAT ATAATAACGT TCATGAAATC GTTACGTTGA CAGGTAGGGT TAATATGAAG CTGGAATAT  
TTCCAGTGT TTAGTAAAA CTGCAAGGGT AAAATGCCCT TAATGCCAGG GCAACACACA CAGGNAATCA AATACCAGCA

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TTTACACGNC AGTAACCCCTT CAAGTTCCTGC CACCCTGTGT GGGGGTAATG CCGTGCAGCT AAAAATATGG GTTTTACGNA  
ACANCCATGG CCTAAGGGGA TTTCTCATAG G

SEQ ID NO:1748: (Length of Sequence = 428 Nucleotides)

AATAGCTTCA GCTGATTGGG TGAGTCCTAT TCATGTTATA AAAGGTACTC TGCTTTCCCTT AACATTCCAT AAATGTTAAT  
CACATCTGCA AATACCTTCA CAGCAACATC TAGACTAGTG TTTGACCCAA CAACTGGGCA CAATAGTTTA GCCAGTTTA  
CACATAAAAC ATCATCACAC TATGCTTCTC TTCTGTGTTT TTTGTTACCA CGZATCTGTT CCATGTGTTT TNCCTTGAT  
ATATCCTATC CTGTCATATC TCTCCTATGG TTTTGTGGAA ACTATAAGCC TTCTGGGGGG TAAACACTA TATCTTTGTT  
CAATTGTTAA TACATCGNAT AGCATATCAT GCCTGGGGGC ATTGGTTAA CCCCCATTT AAATACAGCT NGGCAGCAGG  
ATTTTAGGCA TTCCGTCATG GTGTGCCA

SEQ ID NO:1749: (Length of Sequence = 478 Nucleotides)

GGTTTCACCA TGTGGGCCAG GTTGGTCTCA AACTCCTGAC CTCAGGTGAT CCACCTCAGC CTCCTAAAGT GCTGGGATTA  
AAGGCGTGAG CACNCACAT CACACCTGGC CCTCAACCAT CTCCTTCACC TTCTGCTCAT GACAGTTTAC TAGAATTTTT  
TTCCCTTGAG ACTGAATGTT AAGTCAAAA CAATAAAAA TTGCTAATCA TTACTATGAC TCCAGAGCTA CTGCTTCTT  
TAAATATCC TGAANTTATA AAATATAAAG CCAAGCAAT GAATTTCTAA TGGTGGAAAT GTAGACACTG TGGGCCCCCT  
GGCTGTGTTA TTTTCAGATG GGGCAAGGGG ATATTCTTAA CCTATTTTTA AAATCATGCC AGCCTAGATA ACTATGTGAA  
AAATATATGG GGTGCTTAGC AAAACTATTA CCTAGCACCC CTMTGGCAGT TTTACATTAA AAATCCCTTT ATTAGGTT

SEQ ID NO:1750: (Length of Sequence = 439 Nucleotides)

GACATTTTAT TTCCAGGTG GCACGTGTAT AAGGCACAGG GGCAAATGCC TTTGGGGTCC TGGAACTGGA AATGGAGACA  
GGTGTGTCTC AGGTGTCCCT GCCTCCACCA CCCCCTAAGT GCCTTGAGA CAGGACCAGT GGTGGTGGTT CCAGCCCAGG  
GTCTGAAGG GTNCCACTGG CTCTAGGGGA GAGCCATGGG GACAGCTCCC CAGGCGGGAC CCTCTACTCT CCAGCTACCC  
AGGAGGGACC CTNTCTCCT AGGGGGCGAG GCCAGCTCCA AAGTGCTTNG TGGCTCCCCA GGCTTAAGGG ACCAGNCTGC  
CAGGGAGGGC TNGGNTCANA GAGAGAATAG TAAGATNAGA CGAGGAGAAG CACCCCACTA GCACGGCGAT TGGANAACAC  
TNTGGGCGGT ACTCGTCATG TGGGTAATTT GCCAANTTC

SEQ ID NO:1751: (Length of Sequence = 347 Nucleotides)

CTCTATTACT TATGATTACA CCATGGCAAT ATTCTTTT CACCAGGAGC TTGGGACCTG CGCAGGTGT GGCATGTAAT  
CACCCGGAGC ATGTAGTCAT CTGTAGAAAT CACAGGCACA CTCATGTTTG CTCTGGAAGG AATCTGTTTT CCACAATGAC  
TCCCCCAGC TAATGTACAC ACTGGCATTT TGCAIGCCTT CCTCACACAT GGGGCACCAG CCTTGCTTCA GAACCCCA  
AACTCCACAG AGGCCCTTAA ATATGGGCTA GGGACAGATT TTCTTTAAGA AAGAGTTAAG GANGCAGCTT ACAAAGGGAC  
AAGGCAATT CCACAAGTCA GGCAGCA

SEQ ID NO:1752: (Length of Sequence = 297 Nucleotides)

GGATATTCTA GCCATACAGA TTCAATGGAA CAGAGAAGAG AAAGGAGGTT CCATTGGCAC CATAGTGAGC CATTCAITTG  
CCCAGGGAAG NNGGTGGGGG CTAAGGGGCT AGGTTTGGTC CCATGGCTAC ATTAAATGCT TGGCATGACT CCAGGGCTNC  
TCTAGTTAGT GGCTCCAGCA CAGTATGAGT TAGGTGAGTT AGGTGTAGGA GTTTGGGGAC AAGGAAAAAG GGAGGAGGGG  
TCCCTAGAGG CTNGGTGCCC ATTACATAGA CTCAATTCG TCAATGCGCT GCTTTAG

SEQ ID NO:1753: (Length of Sequence = 402 Nucleotides)

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AAATTTAACT TCAACAAGCT GGTGATGCCC AACTACCCAT TCATCAACAT TCGGTCAAGT GGTGTGGTTC CTCAGAGTGC  
 ACCACCAGTG CCAACAGCCT CTTCOCGGTT CCATTTCCCA CCTCTGGACA CCCATTCTCC AACCAATGAT GTGCAGCCGG  
 GACGGTTCTC TGCTAGCTCC CTAAGTGCTT CTGGCCAGGA GTCCAGTAAT GGTACTGATA GAAAGACTGA GCTTTCAGAG  
 CTGGAGGATG GCTCAGCTGC TGAAGTGGCG CGGGGTGTGG ATCCCGTGTG CTCCAGGAAT GCCATTGGTG GAGGAGGGAT  
 TGGCCATCAG AAACGCAAGC CTGACATAAT GCTTCCTCTG TTTGCTAGGC CAGGGATGTA CCTGACCCC ACAGTCCTTC  
 GT

SEQ ID NO:1754: (Length of Sequence = 397 Nucleotides)

CAGTGGCATC TATGGCTCTA AAATGGAAAG GAGGAGTCTT GGATTGAGGC TACTGACTTA CTCGTGGAAT TTACACATAA  
 CTTCCTTTGA GCCACAGATT TAGCATTCTA CCAGTCACCT GATATTTCTG AGCAGCCACA ATATTTTAAA ACTATATTTA  
 AATCTGAATT TGGAATTTAGC AGAATTTTAT TTTTCCATT TCTATTTCT ATGGTCACTA AATTGAAATT ACAACCATTC  
 TAAAAATTTA TATCATTAAA TATGTAGGAC TTTATCCAGT TTCAAAGTAA AGATGTCTCT AATGTAATTA ATTGINAATT  
 TCACTGATGA GACTGAAATA CAATCAGTCT GTATTGTGTG GTGCGTATGT ATCAGTGGTA AGAGGCTATG ATTAGAC

SEQ ID NO:1755: (Length of Sequence = 353 Nucleotides)

GAATFACTCT GTTGTTCACC TTTTGCTTTT TGCACGTGTT GINCTCTTAT CTGTATTTTG AGCTTAGTGC TAGGACTGAG  
 AGGCTGCACC ATAGGGAATG TATGGGAGAT GGTGAGGGGT GCCAGTINAGG GGTGCGTGA GGAGAGGCCT GGGCTCCTCT  
 ACTGGATCTA CACTCTGTCC CAGGTTTTTA GATCCCACTG AGCCCACTG ACTGAAAACA AGGACAGTCA GGGTGAAACT  
 TCTTTTGCCA GAAGTGTGGC CTGAGTTGAA TTTCTGGGAG GATGACGCAG ATGTCTGCTG CAGAGCTGGG CTGAGAGTTC  
 TNCAATCTAG CTCGTACTTA GGTCAAGGGG CCT

SEQ ID NO:1756: (Length of Sequence = 184 Nucleotides)

TGGGCTCGGA GCATCGAGCT GGACATGCGC ACCATTGCCA CTGCACTGGA ATATGTCTAC AAAGGGCAGC TGCAGTCTGC  
 CCCTTCCTAG CCCCTGTTC CTCCCCAAC CCTATCCCTC CTACCTCACC CGCAGGGGNA AGGAGGGAGG CTGACAAGCT  
 TTGAATAAAA CACAAGCCTC CGTT

SEQ ID NO:1757: (Length of Sequence = 425 Nucleotides)

ATTACAGGCG TGANACCAC ACCTGAGCTA ACTTCCTGGC TTTTCAATCA AACCATCTTT GTCACCTCCT GTCCCCACCT  
 GAAGTCAGAA AGCCTGAAGA GAAGACGGCT CTATTGCCNC AGCTGGAGTG TGGTGGCACA ATNTCAGCTC ACTGCAACCT  
 CTGCCTCCTG GGTTCAGGCG ATTCTCCTGT CTCAGTCTCC TGAGTAGCTG GGATTACAGG TATGCACCAC CACGCCCTGC  
 TACTTTTTTG TATTTTATAGT AGTAGAGATG GGGTTTCACC ATGTTGGCCA CGCTGGTCTC TATCTCCTGA CCTCGTGATC  
 CACCTGCCTC AGCCTCCCA AGCGCTAGGA TTACAGGCGT GTAAGCCACC ATGCCCCGCC AATTTTGCCA GTTTTATTG  
 GGCTATTCTT TATTGAGATC TAGGG

SEQ ID NO:1758: (Length of Sequence = 407 Nucleotides)

AGGAAGGCAT AAGCTAAGCA TCCTTCTAAC CAGTTCCCAA AGTCCCATCT GCCTCCATGT ACCAGCTGAT CGCAGAGCTG  
 GACTGGGGCA GGCTGGGCTT CCAGGAAATT CCTGAAGTTC TGAAACAGCT TCCCCTCTAG AGAAGCCAC CCAATGTGTT  
 TTTTAGTGAC AGGAAGAAAG GAGGGAAGAG CTGATGTGGT GTGGCCTGCC CATATCATAC AACCCACCA GGAGCAGGGC  
 AGTTCCCAAG GTGGGTGCCC GTAGATCTGG GAGGCCAGGC TGGCATGATT CCTGTGAAGA ACTGTGCCCTG TINTGTCAGG  
 GAGAGGCCTG AGCCCTCTCA GAAGCAGGA CAGCCACAAC TGAAGAGCAC GCCAAGCTGA GGCAGCAGCA GCAGCTGGGG  
 GAGCAGT

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SEQ ID NO:1759: (Length of Sequence = 386 Nucleotides)

ATATAITTTT TTTGTTAAAT TTCITTTGAT TTTTTTCCTG CAAGACTTGG TGTTGGCGGC ACTGTTGTAG TTTAACTTCA  
 ATCCCAAATT CCATGAAATA GAAATCAGAA GTAAAGGTTG AGAGGGGAGG AAGGAGGGAG GCAAGCCAAG GAATAAACAA  
 GAGTTTGACT AGAAAAAAG AAGAGGGTAT GTGTGGTGGG CATTCCTGGG CAAGGCCATT CCTTGAGGGA GGGGGTTGGC  
 AGGCAGCTTG CCTCTGCCTC ATGCAGGGGA GGGAGGAAAG ATCCCCTGGG GACCCTGCAG TCCCCTCTTC CTAGGGCTTC  
 CTGCTCCCAG GGGAAAACT AATACCAGAG AGGGATCAGC CACAACCTNA AACAGGGCTC TTCACC

SEQ ID NO:1760: (Length of Sequence = 395 Nucleotides)

CTTCATGCCT CTGGCCGGGT CCAAGCTGGC CAAGAAGAGG GAGGAGGCCA TTGAGAAGGC CAAGCGCGAG GCTGAGCAGA  
 AAGCCCAGAG GGAGCGAGAG GNGAGAAGGA GAAGGAGAAG GAGCGGGAGG AGAGCAAGAG CGAGAGCNTG AGGCAGAGCG  
 GGCGGCTAAG GCGTCCAGCT CAGCGCATGA AGGTGCGCTC ANTGACCCAC AGCTCAGTGG TCCTGGCCAC ATGCGGCCAT  
 CCTTCGAGCC ACCACCAACC ACCATGCTG CTGTGCCCCC CTACATCGGG CCGACACAC CTGCCCTTCG GACTCTGAGC  
 GAGTACGCCC GGCCCCACGT CATGTCGCCC ACCAACCGNA ACCAACCCCTT CTACATGCCC TTAACCCACG GACCC

SEQ ID NO:1761: (Length of Sequence = 378 Nucleotides)

CCCACCAGAG CATTTCAACA AGGCTTACCA CACAGGCCCC AGTACCTTTC TACTCTACAA TGAGGCTCAG AAGCTCAGTG  
 TACCACCCCA TCCCCAGGAG GCCCACTTAG ACCAGAAATC CCAAGTCCAT TAGCTACAGG CTGATATTCA GGGACATCGG  
 TGTAACAAA GAAGTGGGAT ATGAACTATA TCCCTGATTT TTTTTCTTT TTTTTTTTTT TTTTGGAGAC TAAGTCTCAC  
 TCTTGTCGCC CAGGCTGGAG TGCAATGGCG CGATCTTGGC TCACTGCAAC CTCGACTCT CAGGTICAAG AGATTCTCTT  
 GCCTCAGCCT CCTAACTGGG GTAAACAGACA CCGCTACCA TGCCCGGCTC ATTTTTTTT

SEQ ID NO:1762: (Length of Sequence = 351 Nucleotides)

TGATAAATAA AGAAGTCAA AAAATCTTT TAATAGAAGC TATAAAATAG CAGATAAGCT AAGTCATTCT CATAAACAC  
 CATTTGTCAT TTGAATGCGT GCATGTGGC CTGTTACTTT TAAGTAGTCT CACTAATTTA TAGTTATATA TGATGTAGAT  
 CTAGATTGIG ATGTACACTA AGTGGGTTGA TCCYGAGATC AAGCTATGAT TGCTGCTTGC GTAAAGTGT CCYTTTGGGA  
 AATAAATAAT CTTTCATATC TGTAACTTT GGTATAATTG GTTATTTATG CAATGTATG TTGTGGTGT CAACTCAAGA  
 TTGTATTCTC ATCTGGGGAC ATTATGAATC T

SEQ ID NO:1763: (Length of Sequence = 157 Nucleotides)

GTGTWTACTT AGTGTGTAAA GTGAACAAGA AAAGCAGCAT AATAAAGGAG CTGTGTTTTT ATCAGAGGAG CCTTCCTTCT  
 GAGTTTTTAC ATAAGTTGAT GCCTTCACCTG CACTTTTGAA TACAGTGCTT TGAATGTGA AACACTTGAA TAAATG

SEQ ID NO:1764: (Length of Sequence = 321 Nucleotides)

GCTCCTCTGC CTTCACTCC TCCAGCTTCT NACCACTTGG CAACGCACCA CTGCCAGTTC CTCTGGGGCT CTCAGAATCA  
 CTGGAGTACT TCTGCAGCTC TCTTGATGA CCTAGGGGTG CAGCAACAGG CACAAAGCTC TCCTCCAGGT CCTGGATTTC  
 TTTATTTCTT CCCTTCCTTC TCCTTGGTGT ATTTCCTG TGAGNGTCTG ACTCTATCAC TTTCAAAGCT GTGCTGTGGA  
 TTTGGGTCTT TAGATGAGGC TTCATGCCCT GGNATAAGCA AAGGAGCCTG ATACAGAGTT GGCCTGCAGG GAGCAGCTTT  
 T

SEQ ID NO:1765: (Length of Sequence = 420 Nucleotides)

TCAAGCCTGT NATCCTAGCA CTTTGGGAGG CCGAGGTAGG CAGATCACCT GAGGTTGGGA GTTCGGGACC AGCCTGCCCA  
 GCGCGGAGAA AACCCGTCTC TACAAAAAT TTTAAACTT AGCCAGGCGT GGTGGCGCAT GCTGCAGTTC CAGCTACTCG

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GGAGGCCAAG GCTGCACTGG GCTGTGATTG TNCCTACTGCA CTCCAGCCCCA AGTGACAGAG CAAGACTCTA TCTCAAAAAT  
 CAAACAACAA CAACAACAAA ACACCACATA CACACACACA ATGAGGGTAA ACAAATAAG TATGTGTGGG TCACACTTCA  
 GCAGGGGTTG CTGGTTTGCC AGAGGAAAGT GCAATTATTT TATCTATGGG TGTTTATTGT CTCCACTCTA AACTGTCACT  
 TACAGATGGC AAGACTGTTT

SEQ ID NO:1766: (Length of Sequence = 373 Nucleotides)

GTAAATACT AAGACACTAA ATGCGTATTT TAAATTTGCC CATTAAGTTT TGGGCTGCGT AAGAAATTAG TAAAAAATAT  
 TTCCAAATAA CATGCAGAAG TTGTTTTTAA ACTTAAATC TCATATTTTA GCTACACCCA CAGCGATGCT ATAGAGAGGA  
 GCTGGATTTT GTTGTATCTG AATGGCTCAG ATTATGTTCC TTCCAAAAA GTTATTTTAT GTACGATCAT TTTTATATG  
 ANGCAATGA AAAATCACC AGAATCTACC ACGTATTTAC CACATAGACA AATGTCCATC TTTAGATCTG TCATTCAACA  
 CCATGTTATT CTTTTTATGC AACAGAATGC AGTGTGTGTA GAAGTACATC AAG

SEQ ID NO:1767: (Length of Sequence = 330 Nucleotides)

GGTGACAGTG GCGGCANAGC AGCAGCATGG TGGCAGCCAC CAGTGGGCGT GGGGCCCCCG GGGGAGAGGA TGCCCCAGAG  
 GTGCATGAGC AGACCTCGTA ACGTCCCTCC GAGCGGCTCT GGTTCATGTTG TCCTGGAGGG GCGCGGGGCC CCTCTGCCGC  
 GTCCACGCC GCAGCCACAG ATCCATCGGC CTGTGAGTCT CCACACACCA GCCAGTCCCG GGCCGTGGAC TGTGGGTACC  
 CGGGTGCCAC CTCCAGCTCG CCATCCAGCA CTTTCCAGTA CTCTGGCCA CGGAAGAAGT AGGAGGCACC GTNGGACCAG  
 CGCATGGCGT

SEQ ID NO:1768: (Length of Sequence = 361 Nucleotides)

AAGTGGAAAA CCAAGACTGG TAGACTCTCT TTTCTTTCAG ACAATAGGCA GGAGCCAGGC GGAGTCCAGG GATTCTTGGA  
 ACACCTATCT TTTCTTCGGA GGACACTAAG TTCTATTGA AGACAAAGTT CAATATGGCA ACAGGACTGA TGGGACACGA  
 AGGAGTCGCT ACGTGATTT GGTGACAGTT CTTCAAAACG ACAGTNTCTC AAGGAAAGGT GGACCTAGGA ACTCCTGAAC  
 TTTTGGGTTG CCTTAAGTGA GAAATCAGCA TGGCTCAGGC AAGTCTCTG GCTTGTGAAG GCCTAGCAGG TGTGAGTTTG  
 GTTCCCACTG CAGCCAGCAA GAAGATGATG CTGAGCCAGA T

SEQ ID NO:1769: (Length of Sequence = 389 Nucleotides)

CAACTACCGC AGCGCAACT TCAGAGAGCA CATCCAGCGC CGGCACCGGT TTTCTTATGA CACTTTTGTG GATTATGATG  
 TTGATGAAGA GGACATGATG AATCAGGTGT TGCAGCGCTC CATCATGAC CAGTGAGCAG AGTCCGTGCT TGCTATCTGT  
 CTCATGTTAC AGAGCTTCCA TTACATATTA AAGTGAAAT CTATGACTCC TGTACCTTAC CTGTTCAACA GACCTGAAAA  
 TGAGCCATGG CATTGGGACA GGGTCACITC TGACAGGGGA AGTGGGTCCC CAGGTCAGCC CTCTCTTCC CTTTGGGCTC  
 TTGCCAAAGN TGTCTTCCCC TACTGTTAAN CTTGTTTGTG ACACGGTGA GTTCGTATTG GGTCTCGG

SEQ ID NO:1770: (Length of Sequence = 394 Nucleotides)

GCAGTTTAGA GGAAGCTCCT TCTGGGCAAG GTCAGGCGGT CCTCCTTCCC TCTCTCCTTC CCTTTGTCC CAGCCTCAAC  
 TGACTCTGGC TGTGGGAGGT GTGGAGGGTC CTTAGGCTTC CCTCCCCAAC CTGGCCTCCA CCAACACCCC TAACAGGAGG  
 CCCGTGGAAG GCTCAGCCTC TCCTCCGCAT CCTCCTCCT TCCTGCCTAT CGGAGGGAGC CAGGGTCCCC TAGGCTGACC  
 CTGAATCCTC TTCTCCCTT CATGGGAGGG GGGCAGGAAT CCAGAGGAGG ATGAAGCCAG CGGGACCACA TGGCTTNGTG  
 GCTTNGACAA ACAAGCTCAG GGAGGAAATG AGGAGGCGNC GCCTTCAGAG GATTGCAACC CTGTTGGGCA CAGA

SEQ ID NO:1771: (Length of Sequence = 373 Nucleotides)

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CAGAAAAGGC AAAGTTTATT CCAGTGTGTA CAGAGAGAGG GTGAGCCTTG CACAGCAATT CTAAAAACAT GTCATCTCCT  
TCACCTAAGA GGTAAAGANCC GGCTGTAAAGT CATGGGGTCA CTAAACCGGC CGCAGTTACA GTAAGCAGAA GAGGTCACGG  
CTCAGGCCCTT CTCAGACTTT CCCTGGGACA CACGGCTCTC TGGGGGGGCC CGGCGAAACC ACTCGGACCA GGAGCCATCG  
TACACGGCCA CATCAGGCTT NCCGAGAGG TAGGCAGCCA AGGNCACGTG GCAGGCGGTG ACTCCCTTGC GGCACGTGGC  
AATGAGAGGC TTCGAGAGAT CCACCTTCTT GGGCTTGAAC AGAGCACGGA GCT

SEQ ID NO:1772: (Length of Sequence = 281 Nucleotides)

AAAGTGCTGG GACTATAGGC GTGAGCACTT GCATCCGGCC TAGGTGGGGT TTTGTCCCCG TTCTGCAGGA GGGAGACTGA  
GGCTCGGAGG TTCAGGGCCT GCTTGGCTGT ACCCAGCCCC AGTATGTGCC TTGGCCACAC TAGTCAGATC CTTCCCTCC  
CACTCCTGCC ACCCTGCTCC TGCCCTGTCC CATAATCCAG GTTGAATGGG GGTGGGGATT TTNGGGAGCA AGGAGGGCTC  
AAAGAGATGG AGATAGGCT GTTGTGAGC CAAAAGTGCA A

SEQ ID NO:1773: (Length of Sequence = 401 Nucleotides)

CTCTCTGCCA TGCTAACCAA CGTAGAAGAG AATAAGATAA AGCAATGAAA AGCAGAGTGG CACTCTGATA TATAAGATT  
TCTAAGAAAT ATAGAGTGAA TTTTGCCCAA AGGCCCTCAC TGAACTAATT CCTGAACCA AAGAGTATTT CTTAATCCAA  
AACTTTACAG TATTAGACCT ACGAATTCTG ATGATGCCTG ATCAGATGCT AGTGTCTCTC GACAATCCAT GCAGTTTTCC  
AGTATGAAGG AAAGTAACAA ATATACCATG GTTATTCTTA TTTCTTCTG AAAAAATATCT AGGATATTTT ATAGTGTCT  
GTGGTAAAAT ATTCATTGA CANTCACAAT GAAGTATAAT CAGAAGTATT AGCAATTTTA CTTGTATTAT CCGTTAATC  
C

SEQ ID NO:1774: (Length of Sequence = 230 Nucleotides)

TCTGTAAAA AAAAGTAAAA ATGTTACACA TAGGNAATAA ATGTAAAAAG CTATACTTTG CCAAAATAAA GTTTCAGCTG  
AAGGTAAATGC TAGTTATAA TTAAATACAA TTCTATTAG NNCTTGCAA AGTCAAAGGA AGACGGNAAA CTCCCTCTTT  
TGGCAATTCA AAGGCAAAGA CCGTTCAAT TATTCTTAAT TTINCTTAT ACAATCATT TCCCCACAG

SEQ ID NO:1775: (Length of Sequence = 359 Nucleotides)

ATTGAGGACA TAGGCATGGG CAAGGACTTC ATGACTAAAA CACCAAAGC AATGGCAACA AAAGCCGAAA TTGACAAATG  
GGATCTAATT CAACTAAAGA GCTTCTGCAC ATTAAAGAA ATTACCATCA GAGTGAACAG GCAAACTACA GAAAATCTAC  
CCATCTGACA AAGGGCTAAT ATCCAGAATG CTACCTAAT TTTAAAGACT TTTTCCGGCA TCTTGAAAAA AACCACCAT  
ATTTGACATA GGTAAACTG AAAAAACAAA CTATTCATAA TTACAATTG TGACACATTA TGTAGTAGCT AGGTTTCATCA  
CATAAATTAC ATGATACCCC AGTTCAAGTT AAATTTGAG

SEQ ID NO:1776: (Length of Sequence = 375 Nucleotides)

GGCAGAGGCT GCAGTGAGTC CAGATGGTNC CACTNCACTC CAGCCTGAGT GACAAAGTGA CACTCCATCT CAAAACCCCA  
ACTCCCCCA AAATTTTTAA TTTGGTTTGC ATTTCTTTGA TTATGTTTGN GGTGATGTA GACTTGAGGC TGGCACTGGA  
GCAGGCGTTC CCACCTGTCC CGTGAGGCAA AGGTGCTGGG GAGTGACCAA GTGCATCAGG GGGTGAGAT GCCTTATTCT  
GGCTCTTTCA CGCTCAGCCA TCTTAGCATA NGTGAATATA CCATGAGCTG TTTCTCAGCT TGTTTTATTT TCTGNGAG  
ATAGATGTCA CTGGAATGNN CTTTNTCCAA GTGAAAGGCC ATCTTGIGCT ATGAC

SEQ ID NO:1777: (Length of Sequence = 387 Nucleotides)

GATAAGGGAG GAAAGGCAGG AGGAGATGAG GCCAGCCCCA CTGATGACAC CTTGGGCCAG GCCTCACAGC TGCAGGCATC  
AGCCCGAAAC TCCAGGCTGC TCATGGTCAC TGGCGGTGCT GAACTGTCTC TCCACTTTNT TTTGGTCTT GATCTTGAGT

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CCAATGTCCA CTCTCTTCTC AAAGAAGTTC ACCAGCACGG ACTCCGTCAG GATGGAGGCC AGGTTCTGCT CAAAGGAGAT  
GCACCACTCG GTGTGACGG TGCCGCCGAT GCGCGCTGTG GGGCTGCAGG CCTNCCCGCC CACCAGCACC GTGTGCTCTG  
CAAGGTCTTC ACATTGCAGG GAGCCCGTNC TGACCACCGA GTAGGAGGAC ATGGACATGT CGTCTTT

SEQ ID NO:1778: (Length of Sequence = 297 Nucleotides)

CCCCCAACT AGAAGAATAC AATTAAAAA AGAGGCAGTA CACATGGTTA ATAAACAGAT GAAAAAATTA AAATTCACIT  
GTACTATAAG ACAGGCAGAT TAAATTATTT TTACCTATCA AATTAACCAG AACAAAGGCA TGCACITTAG TGAGGATGAG  
GAACATACAG ATTCACTGGT GAAAGTAAAT GTACACACAA CCTTCAAGT TGATAGTTTG GCAGAAGTTG CTAAAAACAT  
TTAAGCTTT CATACTTTTG ATAAGGCTTT TTATTTTAGA AAACATATAA ATAAAAA

SEQ ID NO:1779: (Length of Sequence = 353 Nucleotides)

CAGAAGTAAA AGATTTTAT TGTCTATAG AACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAWT  
GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGAAAA AGGTGCATTC CCTAAGCTG AGGGGGATGG AATTTTCAGAA  
CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CCAAGCTTNG  
NGGAAAGCAA TGAGCTCCAC CCTATTCAGC AGA

SEQ ID NO:1780: (Length of Sequence = 428 Nucleotides)

CGGCTTCCCC GGAGCAGCCG ACAGGGCCAC AGGAGAATGG TATGCTGCTC GGCATGGAGT GAAGACCACC CCGTGTGCAA  
TCIGTTCACC TGTGGGTTTG ACCGGCAAGC CATTGGTTGG AACATCAACA TCCTGCATT GCTACAAGAA AAATAAGGAC  
ACCGGCAGCC CTTAGTTTCA CTGTTTGCCA GCACAGACCT TTGATGGGTG CAGGCTTTTC TGCGTATTAA TCAGCCATTT  
TTGTGAGAGT TTGACCCTGG AAAGGGTGTCT TTGTATATGT TCTTTTCACA TAGTGCCTAG CTTGCATGAA ATGTACAGAG  
AAATGTGTGG TCGTATTTTT TACTTTTGTCT TTGTATATGT ATGGATAATT NGGGTCCCTT GGGCAGTAGA GGCAAAGCTC  
ACCTCCCATG TAGCACATGA AAATGCTT

SEQ ID NO:1781: (Length of Sequence = 459 Nucleotides)

ACCTCAGATT GTGAAGGGCT CTGTAGGCTA TGTTAAGGAC ACTAGAAATC TATTGAAAGG TTTTAAGCAG AGAATTGACT  
TGCTCATATT TTTCCTCAA AAAGCTCAAT AGCTACAAA CCGTCAATAG ATGGTAGCTT TGTTGGGCTG GGGTGAATGC  
AATGATATTG CAAAACAAGA TATAGGGAGA CAAGAACTTT TAATAACCTA AACCAGTGGT TCTCAAACCT TCCATGCATC  
AGAATCACCT GGATGACTTG CGAAAACACA AATAATCAGA CTTAATCCCT ACATTTTCTG ATTTAGCAGG TATAGAATGA  
GGTTTAAGAA TTCTAACAA GTTCCAGAT GCGTAAGGT GTCTCTCAGG GTTTTACTT GAGCAACTGG GTGGATCCNG  
TGGATCTTAT GTCCCTNCGA GTAAGGGGTC AGGTACAGCA TTCTCCGTC AGATTGTTT

SEQ ID NO:1781: (Length of Sequence = 420 Nucleotides)

GAAAGCACAG GAGCCTGCTT CCAAGAGGG ACTGTCCCGT AATTNAGAGA TGCTCCAAGG CTGACCATCC TCCTTCTCCT  
GCTGCACACC CAGCAGCCAT CTATGGCTGG ATTTGGAGAA TTTCTGGTCA AACCGGTGAG TATGAGGAGA GCAGGGCAGT  
TGGGGAGAGA GGTCCAGCC CAATTCTGCC CAGAGAAGCT CCCAAAAGAG AGGGAAGTGT CCTGATGAAG AGCCCATGAA  
AGGGGTGAGA CCCAGAGGC TGTGGAGATT GCTGCGGGCT CCTCTGGTCA GTAAGGAACC CTGACAAGAT CCCTAGGATG  
GGGGTCCCTT AGTCTCACTG AAGTCTTGT AACTTNGGAT TGGGGCCAGG TCANCTCCT CTGATACCCG AGCTACAMAT  
CTGGCTTCCC AMTCTAGAG

SEQ ID NO:1783: (Length of Sequence = 427 Nucleotides)



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AGAGCTTAGC ATGCTGTTGG TTCATGTTTT TATGTGTTTA TTTCACATTG ACITTTGCCG TGAGCTTTGA GGGAGACAAC  
 ACCATCACAT ATGTGTAAAT TGTAAAAGAA TTGGGAGAGA ATAGCTTTGG GAGATCAITTT TCTTACTGGC CATGATGAAG  
 AAAGCTGTAT CGTAGGAAAA TTACTAGGTA ATTTTACTCA CTTGATAAAG TTAATTTGCA AGGTATCATT CGATTGGTAG  
 AGTTACAAA ATGAGAGTTA AAGAAACAGA AATATGGTTT CAGTTTATGG TGCATTCTTA TCTTTTTCAC TGAGTCTATT  
 TCTGTCTGGT TGCTTCACTT AGTACTCCAA CCAGACAAGA GGAAGACAAC TATGCTAGTG TTTTAGGAAA TGGGACAGAA  
 TGGGGTGATT TAAGTAGGAG CCNGGGT

SEQ ID NO:1784: (Length of Sequence = 428 Nucleotides)

ATGGGATACT AATGCAAGCA TTCAGTGAAA AAAGTAGATT ACCAACTAT ACGATCCTCA TTTATTTTAA AAAGTGATAT  
 CACCCAGAAA AAAATAAGAA AGATAAAGA TGTGTGTAATA ATAATAAAG AATAAAAAATA TAGGGGAAAA GGTAGCCAAG  
 GGATAGATAT TGATATTCAT TTTCTTTTAA CAACTTTTAT AAGTTGTAAT TTGTGTGCAA CAGATTGCAT ATATTTGANG  
 TATATAACTT GACTAATTTT GACAAATATA TACACCCATG AAACCTACCAG TTATAATTTT AAACATTTTC ATGGCCCTCC  
 AAAGTTTCCT TGTCCTCTT TGCAATACAC GCAAACACAC ACACCCACA CACAGTATGT AGGGCAACCA TTGATCTGCC  
 TTCTGTTACA ATAGGGTAGG TTTGCATC

SEQ ID NO:1785: (Length of Sequence = 414 Nucleotides)

GTAAACAGAT TACATTTGAA CACCTAAATA AGTATTTGTT TCATAATCAT TACATGCTTG TTTATGATTT ACAAAGATTT  
 GGTAGAGAAA AGTACAGTCC TTAAGGCATA TATATGCCAA TGCAITTAAC TACTCAGCTT TTGTGCCAGC TCAGGTGTTT  
 ATAGGAACAG GAATGTGGAA TACCAGCTTT TTTACTTTAAT TATACTTTTA TGCTGAATTT TTCTTCCAGT TAAACCTTTA  
 ATTACACTAG TATGTAAAGT AGTTACTGAG AAAAATAAGT TTTTGATTTT CCTTCTGTTG GATCTGTAAC ATTTTAAAT  
 GGAGCTATTT AACACATGAC ATGCTAATGT TACTTAATGG GTCTCTGCAT TTTAATTTTA NGAAACACAA ACCTGGGTCA  
 CAAAACATCT TCAG

SEQ ID NO:1786: (Length of Sequence = 397 Nucleotides)

GTTATTCCAA CCAAAATTTT CTAAGATTGA AATGCAGAAA CTTACAGAAT TGAGTAAAAA GACAAAAACG TAAATACTAA  
 ATATTGAAAA GATGCAAGTN CTCCCCAAT AACTCATAG ATTTAATAAA ATTCAAATTT AAAGGCAATT AATTAGGGAT  
 GAGGCAAGAA TCTGGGAAGA AAATTAATCT GAAGTTTGTG TGGAAAAATC AATGGGTGAA ACGAAAATAT TTTAGGATAA  
 GATTAATGAG AAGTAAATTT ATTTCAATTA TAAANGTAAA ATGATAAAAT AGTTAGACCT ATATGGTACT GATGCCAGGN  
 ATGTTATACA AAGCTACGTC AAGGCTTGAG GATAATTTTN TTGAAGATAT TCGTGGGTAT CTCATTGGCT ATAAAAG

SEQ ID NO:1787: (Length of Sequence = 408 Nucleotides)

TCCCACAATT GACAATATAT ATGCATGTGT TTAAACCAAA TCCAGAAAGC TTAAACAATA GAGCTGCATA ATAGTATTTA  
 TTAAAGAATC ACAACTGTAA ACATGAGAAT AACTTAAGGN TTCTAGTTTA GTTTTTTGTA ATTGCAAATT ATATTTTINC  
 TGCTGATATA TTAGAATAAT TTTTAAATGT CATCTTGAAA TAGAAATATG TATTTTAAGC ACTCAGCAA AGGTAAATGC  
 ACACGTTTTA AATGTGTGTG TTGCTAATTT TTTCCATAAG ANTTGTAAAC ATTGAACTGA ACAAATTACC TATAATGGAT  
 TTGGGTTAAT GACTTATGAG CAAAGCTGGT TTGGCCAGAC AGTATACCCA ANCTTTTATA TAATATCCAG ANGGCTATCA  
 CACTGTG

SEQ ID NO:1788: (Length of Sequence = 391 Nucleotides)

CAACTTGGAA CAACTTTTAA TTTTGAATGC TGGTCTGATC AGTCCACGGC CAGGGGTAGG TGGTAACTAG AAACAGCTGG  
 AAGGAGGGAA GGAGAGGGGA CCAGCAGTCC GCAAGCAGGA GGAAAGGAAA GGGTTGGGGA CAGGAGGAGG CAAGGCTGAG  
 GAAGGACCCA GCCAGCTGGG TGTCTGCCCC GGCTAGAGAA CGAACCACCC CCACCCACCA GGCTACCCTC CATCTGTGGC

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TTCAGTGCAG AAGTCAGTCC AGGTGGGTTT AGGCCCATGC CACCTTCTCT GGCCTGCACA GTCCACCCC AGGCAAGGGG  
TTCTTTCCAG AAAGGCTAAA TGCTCTGTCC TAANCCTNGG AAGTGTCCCT TTCAACTAAA CCCCTGGCCT T

SEQ ID NO:1789: (Length of Sequence = 312 Nucleotides)

CAGGGTGAAG TGAGCCTGTG TGGGAAATGA GTCTAGTGTC AGGAGGCTG GCTGCTATAA TGATATTTAT CTCACAGTTT  
ATATTTTCATT CATTATATTT ATTTTITTTAA AAGGTTTCTT TATCAGCTAC TAAACATCTC AGCAATTTGG TGTGCATAGC  
TCTAGATTAA GCAACAAAGA ATTGTACTGA TAACAAACCA CAGGGGAAAT GGTGGTTAGT AAGAGTCAGC CTTATAAAAT  
TTACATCCAC ACTGTTTCAC AGCAAGATTG CTCTCTCCAA AACGTAGCCA TCAAAAGCAG CAAACAAACC CT

SEQ ID NO:1790: (Length of Sequence = 281 Nucleotides)

TGTTTCCYTC ATTAGCTGTA GACTATCCCC TCTCCTCCCA CCACAWIGTT TCTWIGATGA KTTACAAACA GAAAGGAAAT  
CACATTTTCA TACTAAAAAC AAAATGWTC AAGCCTTGAT TTYTCCACTA GAWACTACAC GTACAGTTAA GAGTCCACAT  
GCAACACCTT AAWTCACAGA CTGAGACCTC ACATTYTGAC CTGGAGNTTC CTCCCCTTCC CCAGCCTTGG GCTAGCTTTG  
GCCTAGGCTC AKGTAATACT GACACCCACA GGCGCTGCTC T

SEQ ID NO:1791: (Length of Sequence = 261 Nucleotides)

AGGCAAAGCA GAAAGGTGTG TTIGCCAGAC CAGCATGGGC AGCTCAGAGG GAGCAAAGCA TCCACCAGAA GAGGCTCTCC  
ATTTTTTTGT AGGGCCTGAC AGTTGAGATT TGAGGCTGAG TTAACAWTGG GACCACTGAA CTTTTTTTCCA ATGGAAAAYT  
CACGGCCCAG TCCCACAGGA ACTTTGCGGC ATACCAAACA ACAWTGAGGA AGGAAGGGCC GGGTGGCTCT ACCAAACAKT  
TCAGGTCCAC TGGGTGAWTG A

SEQ ID NO:1792: (Length of Sequence = 324 Nucleotides)

CTCCATCTTT ATCGCTGTG TAAACATCTC TGGTCTGTAC ATACATTTCA TACATCGTAG GGTGGGAAGC GAGGGCCAAA  
GGGAGGCCCC GCAGCACAAC AGCTCACCCG CTTTCCCTAC AGCCCTACCC GCTCTGTGCA AACCAAGGCC AACAGCTCCT  
GCTGCCTCTT CTTCCCTGGA AAAGTCACTG TTATGGGGAG GGGGCCAGGG GTTGAAGGAT TAGAAGGAGA TAGAGGGCTT  
GGTGGGGAGG CCACATNTAA GTCCTAGATT CAAACACTGA AGCGAAACAG GCAACTGGCA CAAGCAGCAA GCTTAGGCAT  
GGGC

SEQ ID NO:1793: (Length of Sequence = 386 Nucleotides)

ACTCTTGGGG ACCCAAAGAT GTCAGGTCCC CATACTCTGA GGAATCAGGA CACAGCCCAG TGCCTGACAC CACAGAGTGA  
GGCAGCCCTT CGGGTGAGGG CCTGGGCCTC GAGGGATGGC AGCCACCACT GCCTAGGCAA ACGCACCTGG GGCTGAACCT  
GGCGCCCGGC ACTTTNAGGA CGCCAGCACC AGTGGGCACT CGGAAGTGCC AGTCTTGCC CAAATTTGGT GACCTGGGTC  
AGAAGGACCT TTCAGAATGA NTGTTCCTG TCAGCAGATA CCGTCAAGAC ACGGCTGGCT CTGAGAGGGG CTGGGTGCCC  
GTTTTGCCTG TATTCCTCTG GGGGCCAGCA CGTCTCAGAG GGTGTCCCTG TGGGTCCCCG GGGTCA

SEQ ID NO:1794: (Length of Sequence = 308 Nucleotides)

GGATGCTCTT TAAACATGC AAATTGGGCC GGGCACAGTG GCTCATGCCT GTAATCCCAG CACTTTGGGA GGCCGAAGTG  
GGTGGGTAC CTGAGGTAC GAGTTCAAGA CCAGCCTGGC CAGCATGGTG AAACCTCATC TCTGCTGAAA ATACAAAAT  
TGGCCAGGCG TGGTGGCATG TGCTGTAAAT TCCAGTACT CGGGAGGTTG AGGCGGGAGA GTTGTITGAA CCCGGGAGGT  
GGAGGTGCA GTGAGCCGAG ATTGCACCAT TGCATCCAG CCTGGGGTGA CAGAGCGAGA CTCTGTCT

SEQ ID NO:1795: (Length of Sequence = 418 Nucleotides)

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GAAACGCTAA GGTITGACA GCGTTACAGT GAATTCTCCG GCTGTAGAGA TTGGAGGAAG TCGGGAGAAA TTCGTCTCTA  
 AGTTGTAAGG TGGAACAGCA TTCATTTTCT TACTGCCAAT GGAGGTTTTT CATGAATTTA CTAACCTCAGT AAAAAGATTTC  
 GGCTTTTTTT TTTTAATCTT AAAGGATCAC GCTTTAAACC TCTGTAACAA AGTAATTATT TGTACCACTC TCTACCCAC  
 CCTCCAACAA AATAACCTAT CGGNTCTCAG AAAATAATAA CCCTTTGCC TGCCTTGAAA TAGTTATCCT TTTTAGTATG  
 ACAGTGTICA AAAATCTCTT TCTTAGACTT GTAGCAGAAC ATAGCTATGA TGATCTGAAT TTTTCTCTTT CAGCTTGTTT  
 TAAGACGAGG GGGACTCC

SEQ ID NO:1796: (Length of Sequence = 416 Nucleotides)

CTTTATTACA TATGCAACCT TGCCATGCCT GCCAGTTAAC TCCCCTCCCG CCAATGTTAT CCTCATGATA TCAGCTCCCT  
 CTGGGGCCA CTGAGCTGCC CCCCTTTCCT TCTGGGCTGG AGTAGTGGTG CCCCTCAAGC AGGCAATGGG CAGGGGGAGA  
 TCCACAATTA ATCGTCGAG TTCTCTTAAA AGTATTAACT CTTAAATAAG CACTCTTGGG GAGTTGCAAA GGATATTTCAG  
 GATGGGATGC AGTGGGAGGC TACCCCTCAT CCAAGGTACA GGCTGGAATG AGCTACAGCT GGGTCTATCG TGGGCCTCAG  
 AAGGTGAAGA GGGACCCTAT TCTGGGGCTT AGTGTGGGTG GGGCATATCC TCCCCTCAACT TGTCTGTGG GCGATGTTCT  
 TCACATCTAG GAGAGC

SEQ ID NO:1797: (Length of Sequence = 298 Nucleotides)

AGGAGGGAAA CCAGATCAA ACTACTACTT CTAGATGAAC ACAGGCTCTT GAGAGTCCCC AAGAGAGGAG GCTGTTGATC  
 CAATCTGAC TCAGACTACC TACCTGGCTT CCTGGCCCTA GGAGGTAATA ATGATAGTNT CAGGGGGTCC ATGTAGCAAT  
 CCAAGCAATT CCTGAGGTGA GAGCAAGCAA AGAGGATAGG ATGAAGGGAA GGCAGGCAAA GAATGTGCTC CTAGTAAGAA  
 GCAACTCTNT TCCACTCACT TCCTTTTGCT CTNTGGCAGG CAAGTCAACT GGGTCTC

SEQ ID NO:1798: (Length of Sequence = 245 Nucleotides)

CTGGTCCATT TTTACAACAN ATACATCCAA AACACTATAT AATANNITTT TTTACAACAT TTCCAAATGA GAAGATTGCT  
 TTINCCCCCA CTACTGCTAT TCACACACAG TACTTCCAGC GCACAATACA TTAGGAGATC TAAANTGCT CACCCTGTAC  
 TCTAGGCTGC TTAGGAAATG TGAAACTAG NAACATTTAT AATGGCATT GCTCCTTTCA ATACAAGGCA ACATTTTAGN  
 AACCT

SEQ ID NO:1799: (Length of Sequence = 312 Nucleotides)

GAAATGTTAG GCTAGTTAGA AGGACACGGC AATAGCCTTG AGATTYTCAA CCAGGGTAGT GTATTAGAWG TAAAAAGGAG  
 AGGAAAGATT TGAGAGTTAT CTCAGAAACA GAACCATCTA ATTTTTTTGG ACTGATTGA CTGCTCTTC ACTCATTTTT  
 TTATTCATC AACAACTATT TTTGAKTNT TTGGATGGGT CAGACATTGC GCTAAGTGAA AAATAGGAAG GTAAGAAAAA  
 GAAGACTCTG AAGATGAATT CCTCCCCAA AACTGAGCTA CTAGCTATTA CTCAGTGGGG CTGAAGTGAC AC

SEQ ID NO:1800: (Length of Sequence = 309 Nucleotides)

GGCATGTGAC ACTAGGCCAC AAGCGATAAG CACAGGCACC TGACTTTTAA GTTTTGTGTT GTTGTGTGTT TCCCAAAGTG  
 CTGATAACAA TAACAACAAC AATAGGATTC CAACGAGNG CCTCAAGTGA CAGCCAGGNA GAGACCTGAA GGTGTTGGCC  
 ACCACAATGC CAAATCGTTT CTAAAGGAAG CTGAAAAATG GGACTGTCTT TTGCCCACTT CGTTGTGTTA AAAGGGGACA  
 TTTGTCNAAA CTNCCCAACC GAGTCTAGA AGTCTCTGAC AAGGAGGCAG CATCCAGCCT TGACCAAGC

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SEQ ID NO:1801: (Length of Sequence = 166 Nucleotides)

CAAAANTTAC TCTGCAAAT TAATATATGA TTTACCTGCT GTTTCATAA GATTTCAAA TAGACAAACT CGGTATGCTT  
 NCGATTGCT TTACATTCTA AGTGGATTG GAGGTCAGG CAGGCGCAA GGAGTACCC GAAGTTTCAT CANGCGGAGA  
 TGTGG

SEQ ID NO:1802: (Length of Sequence = 281 Nucleotides)

GGTGGATGTC TTTGGGCGCA GGATGGAGCC CAGACCCAGT GGTACAGTG TGGAGCTCTC TCCTGTCCC CTGACTCTGG  
 CCAAGGAAGT GAATGCAAAG CAGCAGGGAG GAGGCAGGT GGGGACGGC CTCTGAGCTC TCCGCGATGG CTGGCGTGAG  
 GTGCCCTCTAA GACTTCTNGG CAGCCCTGCC TTCCCTACTC AGTCTTCCG ATCTTNTTGC CACCTTTCTG TGTGGGCCAG  
 NCTCCGCAA GGTACTCAGA GGCGCTCAG AGGCAGGT T

SEQ ID NO:1803: (Length of Sequence = 429 Nucleotides)

TTACAGTTA TAGTTGGGA CATTACAAC CCTTCTCAA TAATTGATAG ACTACTAAAT AAAAAACCAT GAAGGATATA  
 CAAGAACTGT ACAACACTGG CCGGTGTGG TGNCTCATGC CTGTAATCCC AGCACTTTGG GAGGCTGAGG CCGGTGGNTC  
 ACTTGAGGTC AGGAGTTGA GACCAGCCTA GCCAACATGG CGAAACCACA TCTCTACTAA AAATACAAA AAATTAGGCT  
 GGTGTGGTT GGTTAATGC CTGTAATCCC AGCACTTTGG GAGGCCAAGG TGGGCATATC ACCTGAGGTC AGGAGTTTGA  
 GACCAGCCTG AAAACATGG TGGAAACCCA TCTCTACTAA AAATACAAA ATTAGCTGGG TGNGTGCCT CTGAAAAAT  
 TAGGTAACT CCGTCTCAA AAATAATAA

SEQ ID NO:1804: (Length of Sequence = 278 Nucleotides)

GACCTGAAGC TCAAAGTCTC TCTCCTTACA CAACCAGCGN CAACAGGGCC AAGCTACTGG CTAAGAACAG ACAAACTTTC  
 CTGCTTCAGA CCACAAAGCT GACCCGNTT GCCAGACGCA TGTGCAGGNN CCTNTTACAG CCAAGGAGGG CCGCCCGACG  
 GNCTTATGCT CCTATCAATG CCAATGNCAT CAAAGCAGAG TGCTCCATTC GNCTTCTTAA GNCNCAAG ACTCCATTNA  
 AGATTACCC TCCTGGTGG GCTGNCCTG GGAATAT

SEQ ID NO:1805: (Length of Sequence = 349 Nucleotides)

GCATCCATGG CGGAGGGCGG CAGCAGAGG GCGGGGCTCC GCAGGTCGTA ATCTGAAGGA GTGGCTGAGG  
 GAGCAATTTT NTGATCATCC GCTGGAGCAC TGTGAGGACA CGAGGCTCCA TGATGCAGCT TACGTCGGG ACCTCCAGAC  
 CCTCAGGAGC CTATTGCAAG AGGAGAGCTA CCGGAGCCGC ATCAACGAGA AGTCTGTCTG GTGCTGTGGC TGGCTCCCT  
 GCACACCGTT NCGAATCGG GCCACTGCAG GCCATGGAG CTGTNTGGAC TTCTCATCC GGAAGGGGGC CGAGGTGGAT  
 CTNGTGGAG TAAAAGGACA GACGGCCCT

SEQ ID NO:1806: (Length of Sequence = 403 Nucleotides)

GTGAGTGTG GCCAGATCTT TTCTAGTAAA ATGTGTGTTA CTGATGGCA GACAGCTCTC ATTCAAGCAG TGACAGATGT  
 AAGCCTTCC CATTTTGTG GCCCCATTGT ATTACAGGTG TGGCTTCCA GTTGCCTGGG ATCATCTCCA CCCAGACTAA  
 GGAAGAGGAA AGAGCTTGA CAACTGCACT TGGCTGTTT TNATGGATCA GGCAAGGAAT TGGCTCCAAC ACATTAGCTC  
 ACATTCCATT GGTAGAACT GGGTTTCTCA ACTATTAGTA CAGGTGAGT GTAGGGTTTT GGCACCATGG GCATTGAGC  
 TGGCAAAGG CTAATCAGAG TTAGAACAAA GCCACAAAGC CTGTGAATGG TGTTATTGT TGTGAGGAGC TGTCTGTGC  
 ATT

SEQ ID NO:1807: (Length of Sequence = 426 Nucleotides)

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GTCTCTCAGCT TCACTCTGGC ACCACTGTGA GCACCGGGAA ACCTACCAGA AGTTGCTGGA GGACATCGCT GTCCTGCACC  
 GCCTGGCTGC CCGCCTCTCC AGCCGAGCTG AGGTGGTAGG CGCCGTCCGC CAGGAAAAGC GCATGTGGA AGCAACGGAA  
 GTGATGATGC AGTATGTGGA GAATCTAAAG AGGACGTATG AGAAGGACCA TCGGAGTCA TGGAGTTTAA AAAGCTTGCA  
 AATCAGAAAT CAAGCCGAG CTGTGGCCCC TCTGATGGGG TCCCTCGCAC GGCACGGTCC ATGTCCCTCA CGCTGGGAAA  
 GAATATGCCT CGCCGAGGG TCAGCGTTC TGTGGTTCCT AAGTTTAAAT CCCTGAATCT GCCTGGGCAA ACTNCCAGCT  
 CATCATCCAT TCCTCCTTAC CAGCTT

SEQ ID NO:1808: (Length of Sequence = 431 Nucleotides)

GGTACTTTTC CATTTAGATT CAAATGGAGC TAAAATTAAG AGTTTTATGA GCTGTTAAGA ATGAGGTAGT TTCTCCTAGG  
 ACCCCCCAAA GACAGTGCAA GTAATGACCG TTTGGNTCTC ATTCTGCGAT CTTTGATAGT ATGTNCTGGA GTCTACTCCC  
 CAGGAGCCAG GACAGGCGTG AAGATGGAGT CCTGTGCGCA GCTGGAGCCT TGCCTAGCTG GTGATCACAC AGCCTGGNCT  
 GTACCTGCAC CCCACTGGAT GGTGGTACAT GGTGGCAGGG ACAGGACCAC ACCCAGTTAA GGCCAGACCA GGCTGAGTGT  
 GACCCCTGAG GTAAACACTT CACTAAGCTG TGTCTTGTTT ATGCCCCCTG CTCAGTGAAA GGTGAGTCCC GAGACCAGTT  
 GGGTACCTCT CTTATGCGAA CCAGAGACAT T

SEQ ID NO:1809: (Length of Sequence = 401 Nucleotides)

CGTGAGGCCT TGAGCACAAG TGCAAGCGGG ACATCCTGCT CGGCCGGCTC CGGAGCTCGG AGGACCAGAC CTGGAAGCGG  
 ATCCGGCCCC GGCCCACTAA GACCAGCTTC GTGGGCTCCT ACTACCTGTG CAAAGGAGGA GATCGACGTG TGGACCGAGG  
 AGCGGAAGGG CACCCCAAC CGGACCTGC TCTTCGACCC GCTGGGGGGT GTTAAGCGCG GCAGCTCACC ATCGCCAAGC  
 TCCTGAAGGA GCACCAGGGC ATCTTCACCT TCCTCTGCGA GATCTGCTTT GACAGTAAAC CCGGATCAT CAGCAAAGGC  
 ACCAAGGACT CTCGCTCTGT NTGCTTCAAC CTGGGCTGCC AAGAACAGCT TTTTACAACA ACAAGTGCCT GGTGCACATC  
 G

SEQ ID NO:1810: (Length of Sequence = 233 Nucleotides)

AAGTGCTATA TTCAATGTAT TATAGAGAAG GTTGGGGAGC ACAGAAGAGG ATCAACCCAG CTTTAGAAGG ATTAGAGAAA  
 GCTTCCAGAG GGGTGGACAT TTGAGCTAGC AAGAAAGCAC AAGGGAAAAG GCATTTAGAC AGAGGAGACA ATTTGTCTTG  
 ACCCAGAAGC ATTGGGGTAT GCTATGCATG GATAGNCAAA GAATTTTTGC AAAAGGGGGG CCAGCAAGGC ATT

SEQ ID NO:1811: (Length of Sequence = 423 Nucleotides)

CAAAGAAAGA GTTGAAGTAT GTACATGAA AAAAGGAAAG ACATTTTTTC ATACCAACCT TTCCCTAGTT CGCAGTTTCT  
 GAATAGTAGA AACAAAACAC ATTTTAAAT CTTTCTATCA ATTTAATTTA GGACGAAGTA ACACAACCTT TATAATTAAAC  
 CACTGAAGTT GTCTTTAAGG ACAAACCTTA AATTTTAAAA TGGGTGTTAC CATATTINAT GAGTGGACTG ACTCCAAGGT  
 TGCCTTGCTC CAAGNNTGGG CATCGTGACA TTGCCGTGAT GCCAGAAGA AAGTTAATGG CAATGATGTC CAGTCAGAGG  
 GCAGACATGC TACACATCAC AATGATGAGA GCTGCGGGAT TCTGCCCTCT TCAACTTCCA AGTAGNAAAT TATTATTTTC  
 CATTCAAACCT AACTGGGAGT GAG

SEQ ID NO:1812: (Length of Sequence = 394 Nucleotides)

GACCAGCCTG GCACTTAGT GAGACTCTGT TTCAGGAAAA AAAAAAAAAA GTGTATTGG CTGTTCTGAA GCAGGCCATC  
 ATCACCCCTC ACCTCACCCA CAGGTGGCTC TCGGGGGCTG GTCCATGGGC GGCTGTGGCG TNAGGATGGA GTCCTAGCTG  
 TGACCTGTGC CCAGGAGGGC GTGATCCGAG TGAAGCCCCA GGTCTCAGAG AGCAAGCTGT AGCCAGAGGT ACCAGCTTCG  
 CCTGGGGCTT CAAGAACCCT CCATCTATCC CCATTCTGA GACAGGAGTT ACAGTCCCTT TTGNNCTNA CATCCAATAA

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AGAGACTGAT ACCACTGGAG TGGCTGGCTT TTAATTCCTT TGGGCCAGAC CTGCAGCCTT GCCTTAATCC TTAA

SEQ ID NO:1813: (Length of Sequence = 344 Nucleotides)

CATCAGCGAC AGGTCTCCCT CCCAGAACCC CATCAGGACA GGAGAAAAGG CAGCAAGAGA GGTGGGGTGG TCCTGGCAGG  
TGGGCCACCA GINTTCTGAA TGAAGAGTGA GTCCCGGGT CAGGAGTCCAC ATCAGGTGTG GGCTGCTTCC AATCTGTAGG  
TTCTCCTGGA GATTINTACA ATCTGCCAGC TCTCTGGGAA TCACAGAACC ATCATGTCCC CTTAGGATGG CAGAAGATGT  
GGCAGAGCCT CAATCTCCAA CACTGAAACA CTNAGAGAGC TTGATACGTT CCTTAGGCAG GGCAGAAACA TCACAGCACT  
TCACGNTAGG AACCACGAAA GAGT

SEQ ID NO:1814: (Length of Sequence = 442 Nucleotides)

GACACAGCAG GCCCTGCCC CTGAAGGAGA CTGCATTGGA ATTTTGGCCA GGTGGCCCTG ACACATAGGA ATGCCCACT  
ACTGTGACTA CCCTCTGAGA TAAAAGCTG TCCTACTGAT TTTAGAAGGC CAAATTAGA GGTCAATTTG GAGGTCATGC  
CAGTGGACAT ATAACAGTTT GAAATGCTTG TTCCCGGTG CCGTAAAGAA ATAGTACTTG AACTTAAATT TATTACAGAA  
GGCCATTTTT ATTTCTGCA GAAAGGGTAC ACTTGGCAGC AGTTTINCCA CGAGAGTACC CCGAACAAAG GAGACAGGGT  
CATTTATAAC CTGACGCGTC CACCTTCTG CTGTGTCGG TTTCCATTGG CTGGAACAGG ACCTCACATT CTGTATTTGT  
CCCGATTGGC TAGCAACTTA GGACTTATTA AAAGAGGCAA AG

SEQ ID NO:1815: (Length of Sequence = 299 Nucleotides)

GCAGAGAATC CCTTGAACCT GGNAGGCGGA GGTTCNAGTG AGCCGAGATC ACGCCACTGG ACTCCAGCCT GGACAACAAG  
AAGGAACTC CATCTCAAAA AAAATTGAAA AAAAATTCAN GANATACAGA ATGCAAAANG GGACCAAAAA AGTACCAAAA  
ATTTCAAAAT TTTGTTAAAC TGTACCAAAT CTGGNTACGA AGCGTTATTT TTGCCCACAG GGCACCTCCC TGGAAAGNCG  
TTACAATAGC TNAGGCTTCC TCTTCAGATA GANTTAGAGT GGCACTAGGA TAGGCTCTT

SEQ ID NO:1816: (Length of Sequence = 286 Nucleotides)

ACCCCGGGT CAGGTATGC TCCCACCTCC ACCTGCCCCA CTCACCACCT CTGCTAGTTC CAGACACCTC CACGCCACC  
TGGTCTCTC CCATCGCCCA CAAAAGGGG GGCACGAGG ACGAGCTTAG CTGAGCTGGG AGGAGCAGGG TGAGGGTGGG  
CGACCCAGGA TTCCCCCTCC CCTTCCCAA TAAAGATGAG GGTACTAAAG TTGTCTTGGT TTTTATTTTA TTATTATTTT  
TTTCTTTTTC CAGTATACTA GCTTGTCTTT TAAGAAAGGG GATATT

SEQ ID NO:1817: (Length of Sequence = 320 Nucleotides)

GAAAGGAAGG CCAGGGTGGG AGGAAGGATC AGCTAAATCT GAGGGAAGAA GAAGGAAAGG AGAGGGACTA TTGCATAGCA  
GATGCAAATG AAGGGACTGT CTTATTATAC AGTTTTATCA TCTGTAATA CTCATAATCT TGTTCTTTT TCAACTTTTA  
TATAATTTTA TCTTACATT AGTTAAATCA AAAATCTTAA AACACATTTT AAACGTGGTC ATAGGTTACT TTTATATATT  
ATTGAATTTA TAATAACAT GTTCTTTTNC TGGAACTGG GATGGNACCN CGATGGTGTT TCTTGAATAT AAGAGTGTCC

SEQ ID NO:1818: (Length of Sequence = 356 Nucleotides)

CCCAGGAGGC TGAGGCAGGA GAATCGCCTG AACCCGGGAG GCAGAGGTG CAGTGAGCCG GGATTGTGCC ACTGCACTCC  
AGCCTGGTGA CAGAGCGAGA GTTCATCCAG ACACACACAT ATATATATAA TTNCCAAACA GGCTTTACTA AACCCCTGA  
GGTCTCATGA CACAGTAGAA AATCATGATT TAGTAGAAAG AGCATGGTCG TAGGAATCCA GTAGATCAGT AGACCTGAGT  
TAGAGTCCCA AATCGCCAC TTCAATCTG TATGGCCTCA GGCAAGTAC TTAANCTTTC TGCTCTCTG TTTCTTTAT  
AAAATGGGG ATAATAATAG TAACTTCTTC ATAGGG

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SEQ ID NO:1819: (Length of Sequence = 328 Nucleotides)

CCACTCCTGT AACCTGCTGG ATGACTCTGC ACTGCCCTTC TTCATCCTCA CCAGTGTCTT GGGTATCCTA GCTAGCAGCA  
 CTGTCTCTT CATGCTTTTIN AGACCTCTCT TCCGCTGGCA GCTCTGCCCT GGCTGGCCTG TCCGSCACA GCTGGCTGTG  
 GGCAGTGCCC TCTTCAGCAT TGTGGTGCCC GTTTTGGCCC CAGGGCTAGG TAGCACTCGC AGCTCTGCCC TGTGTAGCCT  
 GGGCTACTGT GTCTGGTATG GCTCAGCCTT TGNCCAGGCT TTGCTGCTAA GGGTGCCATG CCTCCCTGGG NCACAGACTG  
 GGTGCAGG

SEQ ID NO:1820: (Length of Sequence = 359 Nucleotides)

CCACCATGCT CTGCACTCGC NCTGGTACCA GGCCCGCGAC CTCATGCTCA TGAGCCACTT GCAGGACAAC ATTCAGCATG  
 CAGACCGCC AGTGCAGATC CTTTACAACC GCACCATGGT GCAGCTGGGC ATCTGTGCCT TCCGCCAAGG CCTGACCAAG  
 GAGCACACA ACGCCCTGCT GGACATCCAG TCGAGTGGCC GAGCCAAGGA GCTTTTNGGC CAGGGCCTGC TGTGCGCAG  
 CTTGCAGGAG CGCAACCAGG AGCAGGAGAA GTTGGAGCGG CGCCGTCAAG TCCCCTTCCA ACTGCACATC AACCTNGAGC  
 TGCTTGGAGT TTGTTTANC TGGTGTCTGC CATGTTCTT

SEQ ID NO:1821: (Length of Sequence = 208 Nucleotides)

CCTGGGTCTG TGACCCAGAG TTCCAACACA AAGACACTTT GTACTGGAAC GCTGGAGCCA TTCCAACATG AACAGCAAGA  
 ATAGAACCTG TGCTGGCTGG TCTAAGATCA AACCTCGNGA TGGTGGTTTG AAGTNCCTT TCAAAGAAAG CTTGAAAATG  
 AAATCTCAGT TAGGCAAGNC AGATAAAAGC AGAGTTATTC TGGTGGCG

SEQ ID NO:1822: (Length of Sequence = 314 Nucleotides)

GGATGINTTG AGCCAGAGTT TAAGCCTGAC ACACAGGCTT TGGTCTCTAC TGAGCTGTCT CCAAGACTGG AACTACTTAG  
 TGACTCGGCA AATTTCTGTC CCCCCACCC TCATCAAAGC TGCTAGTTCA GATGTTGACA GTGTTTTCAT GAATGTTGGA  
 ATCTTACTAG TCCAGACTTA CTTAGGATGT TGTGGGGGAA GGCACCTGGG ATTTTCGTG TCTTGCATT CACAGGGGAG  
 GCCATTTAG ATTCAAGAGC ATTKGATTAG GGGATCGTGA GGCAGGGATG CTAAGCGKA TTTCTCTCTT CAGG

SEQ ID NO:1823: (Length of Sequence = 344 Nucleotides)

AACAATTTTG TCTTTACTAC ATCTTAAAGA ATTAGAATT GGGTTGGTGT AAGTGACTTA CTTCCAGGGN ATCATGCTCT  
 ATTTCTACCA GCAGGTCATA CCCNAATGTC AACTATCTA TTGTTAACCA TGAATGNTAT TCAGATCTAT TACTTTTCTG  
 GAAAAGTGA ACATGTTACT TCCAACCATG GCCTGTCACC GTGAGTGTGA TCANCTTNT CCAAAACCAC ATGGGTGCGA  
 GGAGCTAAGG GGTGGTACCC MAATGTTAGG GACAGTGTGA GGAAGGGCA AGGGAAAAGA AGTGACTNGA TGTCTTATGA  
 GRAACCGTA AATGGCTTAA AAAA

SEQ ID NO:1824: (Length of Sequence = 340 Nucleotides)

GTGAGTGGCA GGTATCATGA ACCACATTGT GGACCTGGAG TTGCTAGGAC CTTTTCTGCC ATTACACAGA AAAATCCTCC  
 CTGAGAACAC AGCCATNGA GGCACATGG CAGAGGAAGA TAAGACAATA AACAGAGNCA CATAATTATG GCCAGCGTGG  
 GGGCTNACGG CTGTAATCCC AAAACTTTNG GAGGCGGAGG TGGGCAGATC ACCTAAGGTC AGGAGTTGGA GGCCAMCCTG  
 GGCAACATGG TGAAACCGT CTCTACTAAA AATACAAAAA TTAGCCSGGC GTGGTGGCAC GGGCTGTAG TCCTAGCTAC  
 TCAGAGGGTT AGGCAGGAGA

SEQ ID NO:1825: (Length of Sequence = 357 Nucleotides)

AATTTGGTGT TGGCCAAATT CTCAGTCCAA TCACCCTGGC CCAGGGCCTG GCGTGGGAGG ATGTGGCAGG CTCTGTCTCC  
 TTCTGGGGTT CTTGGTCTGG AGGAGTCTCC CCAACAGCGC CAAAGCTGGC TGTTTTCCGC CCAAGCCCC AGAAGTTTGA

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ATGAGAGGCA AATCTACCCT GAATGCACCT CCTCCTAGG CTGGGTGAGG TCACGCAGAC ACAGAAGGGC AGGACAGAAC  
TCCCCATCTT CTGGGGGCCA ATTCGTCTGG AACTGTGCG GTCANCITCC TTTTAAAGT GCCAGTATCG GTGGGGCAGG  
AAGGGACTCT CAGGGCTGAG CAGAGCCTTC TTCAGCG

SEQ ID NO:1826: (Length of Sequence = 207 Nucleotides)

CCGGCCCCCTT CAGTCCCCAG CCCCTGCCCC AACTCCGACT CTTGCACCCA GCCCGGCTTC AGCCCCGATT CCGACTCCCA  
CCCCGGCACC AGCCCCTGCC CCAGCTGCAG CCCAGCCGG CAGCACAGGG ACTGGGGGGC CCGGGGTAGG AAGTGGGGGG  
GCCGGGAGCG GGGGGGATCC GGCTCGACCT GGCTTAGCC AGCAGCA

SEQ ID NO:1827: (Length of Sequence = 309 Nucleotides)

GTGTGCGCCT GTAGTCCCAG CTAATCCGCA GGCTGAGACA GGAGAATCGC TTGAACCCCTG GAGGCGGAGG TTGCATTGAA  
CCGAGATCGC ACCACTGTAC TCCAGCCTGG GTGACAGAGC GAGACTCCAT CTATAAAATA AAATAAAATA AAATAAAATA  
AAATAAATAA AATAAAATAA AATAAAATAA AATAAAATAA AATAAAATAA TAAATAAAAA TAAATAAAAA TAAATATAA  
AATAAAATAA AATAAANTA GAACCACCAT ATGANCCAGC AATCTCATTG GTGAGTATAT ATCCGAGGG

SEQ ID NO:1828: (Length of Sequence = 382 Nucleotides)

ATCTCTGACC ACCCCCTCCT CCCCATCCCA CCTTTGGTA ACTCCCCGC CCAGNCACT GCCAGATAT ATTCTTCTCC  
TTGGGCAAGA AGTTCTGTGC ATGCAGGTCA AATCTGAAAG GGCATTTCT TTTTAAATG AGTGTGAGG ATGGGGGATG  
TGGCTGATGA TATAAGGGGC CCTCCAATCA GACTTTCTAA TCTAACTGAA AAGNTAATTA CAATGTTGAT GCTAAAAAG  
AAGGTTCTGG CAAAATAGAA CTCTGAAGC ATCATAAATC AGATGACTAA TATTTGTGAT CCCNTTTAA ATTTTCATGT  
GAAGAAGAAT AGGGGATGTA ACTGAAGRAA TGNACTAAAA GTTCTTCTAT GTATTGATAA CC

SEQ ID NO:1829: (Length of Sequence = 361 Nucleotides)

GGCGCGCCT CTGGAGCTGG ATGTCCAGGC TGCGGGCGCT GCTGGGCCTC GGGCTGCTGG TTGCGGGCTC GCGCTGCCG  
CGGATCAAAA GCCAGACCAT CGCTGTTC TNGGGACCCA CTGGTGCGG ACCNCAGCG CTGAACCTCG GTGGCGCTG  
GGACTCAAAG GTCATGGCGA GCACGGTGGT GAAGTACCTN AGCCAGGAGG AGGCCAGGC CGTGGACCAG GAGCTATTTA  
ACGAATACCA GTTCAGCGTG GACCAACTTA TGGAACTKGC CGGGCTGAGC TTTGCTACAG CCATCGCCAA GGCATATCCC  
CCCACGTCCA TGTCCAGGAG CCCCCCTACT GTCCTGGTCA T

SEQ ID NO:1830: (Length of Sequence = 180 Nucleotides)

AAGAAGCTG GCTGCCTGCA GGAGGCGCTG CAGCTGGCCA CTTCCTCGN CCANCTCGN CTCGGGGATG TAAAGAACTG  
AGTGGGGAAG GAGGAGCTC CCACTGGATC CATCCGTCCA GCCAAGAGCT CTTCACTGC TACAAGAACA TTTGAATCTT  
GGGACCTTTA AAGAGCCCCT

SEQ ID NO:1831: (Length of Sequence = 335 Nucleotides)

AGATCTTCTA TATTCGACT ACTGATTCAA ATGCTAATCC TGGACGGGCA TGGTGGCTCA CACCTGTAAT CCCAGCACTT  
TGGGAGGCTG AGGCTGGTGG NTCCCTGAG GTCGGAGTT TGAGATCAGC CTGGCCAACA TGGTGAAACC CTGCTCTAC  
TAAAAATACA AAAATTGCT GGGCGTGGT ACATGCGCT GTAATCCAG CTAATCGGA GGCTGAGGCA GGACAATCAC  
TTGAACCCGG GAGGCAGAGG TTGAGTGAG TTATTGCACC ATTACACTCC AGCCTGGGTG ACAAGAGCGN AATTCATCC  
CCCCACCAA AAGCG



SEQ ID NO:1832: (Length of Sequence = 337 Nucleotides)

GTATTTGGAG ATGGGACCTT TGGAAATGCT TTGATTAGGA AGAAGGAGCT TTCATGAACG GGATTAGTGC CCTTATAAAA  
 GAGGACGAG AGAGCTCTCT CACACCTTCC ACTGTCTGAG GNCACAGGGA GAAGGCCCTG TCTATGAACC AGGNAATGAT  
 CCCCACCCAG AACACCTTGA TCTTGGACTN CCCAGATGCT CCANATCTNT GAGAAGCAAA TTTCTGTGCT TTATAAGCTA  
 TCCAATGTAT GGAATTTTNG TACAGCAGCC CCAACAGACT AAGNTATTAA TAAAATAAAG ATGTAAGATC TCTGTTGAAA  
 ATGCACAAAT AATATCT

SEQ ID NO:1833: (Length of Sequence = 244 Nucleotides)

TCTCTCATTG TAAGCACAAA TTGTTCCGTG TCTGGTTATT AAAATCGCTT TGGGTCTATA ACAGCCACTC TTGTCCCCC  
 TTTTAATAGA AAATGTGTCAT TCTAGCCTGG ATTTCTCCCC ACTGGAGGTG GAGGGTGGGA AGAGAAGGGA GTCAGCTCTG  
 ACAGCTTACA AACTGGGAAG TTCTGTGCAT CTCCAGGGAT TCCAGAGTTG AAGATCTGGT TGTGGAAGC TGGGCGCCCA  
 GTGC

SEQ ID NO:1834: (Length of Sequence = 322 Nucleotides)

TCCTGTACTA CACCTTGGCC AACATGGCCA TGTTGAACCA CCTGCGCAGG CCCCCTCCT GCAGTACCTG TACTACCTGG  
 CCCAGATCGG CATGCCATG TCTCCGCTCA GCAACAACAG CCTCTTCTC AGCTATCACC GGAATCCGCT ACCGGAGTAC  
 CTGTCCCGCG GCCTCATGGT CTCCCTGTCC ACTGATGATC CCTTGCACTT CCACTTNACC AAGGAGCCGC TGATGGAGGA  
 GTACAGCATT GCCACCCAGG TGTGGAAGCT TCAGCTCCTG CGATATGTGT GAGCTGGCCC GCAACAGNGT GCTCATGAGC  
 GG

SEQ ID NO:1835: (Length of Sequence = 178 Nucleotides)

ATGAAAGCAC AAAAGAAGTC TATCAAAATT ACâAAAACIT AAAACCGAGT AAACAAACT TCAGAAAGAA TGAAACAAT  
 TGGAAAATAA CTTCAGAAA AAAATGTAA ATGGAAACAA TACAAGANCA ATTTGTGCC TCTGAAAAC AGAGGTTAA  
 GTCAGAAATT TTTGTINC

SEQ ID NO:1836: (Length of Sequence = 377 Nucleotides)

CGCCTGACAC CACACCCAGC TAATTTTGT ACTGTTAGCA GAAACAGGT TTCATCACGT TGGCCAGGCT GGTCTCGAAC  
 TCCTGACCTC AAGTCACCCA CCTGCCTTGG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGTGC CCGGCCTTTA  
 TGCTGAGTTT TAAGGCTGT ATGAGACACC AGGTGGTGGG AGGGAGCTGT TTTGAGAGCA GGAATTTAG GATACTTAG  
 AAATTAGAAA ATTAGAGAAG TCATAGGATC TTGGAACATA GGGAGAACCT TAGAGTCCTG TGGAGCAGAA CCCAGCATT  
 GTATGTGGAG GAAACGAGG GCCCAGAGAA GTTGTGACTT ATNCCGGGT CAATCTT

SEQ ID NO:1837: (Length of Sequence = 388 Nucleotides)

GGAGAGAACA AACCTCTTA CTGGCCTTGG GCCCATCCCT CTTTCTCCA CACTGCTACT TTGAGTTAT CTCATTTTGC  
 TCCCAATAGT CAGCCTGAC TTTTCTGGGC TTACCTGGGC ATCAGGGACC CATGTTCAC ATTCAGTTGT CCGATTATG  
 TCTGCCTTAG AGCGTCTCCT AGGGCAGCCA GTCTGGAACA GTCAGTCACC TAGGGTCTG GAGCTCCTGC AGTCTGCCAC  
 TCGCTNCTTC TGCCGTGATAA CAAATACTAT TCCTTTTATC CTTGCACTC GACCCAGAAA GAGGTGGCTG TCAATGTCCA  
 AGGCCCTGG GAAACGAAG ACTGGAATN TGAAACCACT GGGCACAGG GGAATGGGTG GGTCTGAG

SEQ ID NO:1838: (Length of Sequence = 369 Nucleotides)

TCTCTTTATG CCAACAATTA ACTGGGAGCT AGGTTAAATT ATTTGGCTAG ATAAACTAC CAGCTAGATG GATTTATTG  
 GTGCCCTCAT ACAGAATGCT GTAGAAAATG TAAAGAAGAG AAAGCTCCTT CCAGCTAGAA GCACATGGGA CTGCTTCTAG

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GATGGAAACA AGTCCTGCTA TTTTCACAAT CCTAAGNGT TCTCCAGGCC TCTGGAGAAC AAAGTAAAGT TGTAAGATCC  
 CCAAAGACAC GGAAATCCT GGACGAACAG ATTAGAAATA ACTACAAAA ACAAGTTTTT TACTTTCGAA AAGGGTACTG  
 CACTGAAACC AAGTTGGACT TTTGGTCCAC CCCAGGGCC CTCTTCAGG

SEQ ID NO:1839: (Length of Sequence = 359 Nucleotides)

CNNGTAGGGA AGAGGACTTT ATTGGGATGT TAGTAGGGAA ACATGAGAGG GTGAATTCCA GGGAAATAGAC ACTAGGACCA  
 AGGTGGCGGT CACCTTAAAG AGCCATAAAT AAACCTAAAA AATTAAGGTG AGGAGGTGCC ACGTGGGGAG GCTGCTGGGA  
 CTATCTGGGA ATTCTTAGGG ATGGAATTTT GGAATTGGAA AGGGGAAATA AGAATTTCCA GCCGTNTCAC AAAAGGGTGT  
 GAAATGATCA CTTCAAGACT CCCTGCTGCC CTAGGCTGGG AGTTGGGGTT CTGGGGCTCC AGGAAGAGGG GAGGTCTGGG  
 CTCGGCTTNA AGGGGTGAAG AGGGCCCGGT CAAGGTGCT

SEQ ID NO:1840: (Length of Sequence = 360 Nucleotides)

CCAATGAGCC CAGCCTGACA CATATGGACT GCTCGACAGG TCCACTGTCC CACGAGCAGA AGCTGTGACA AAGCTTGGAA  
 ATTGCCTTGG CATCCACCTT TGGCTCTATG CCCTCCTTCA CGGCACGGCT GACCAGGGGA CAGCTCCAGC ACCTTGGCAC  
 AAGAGGGAGC AACACTTCCT GGAGGCTGG CACCGGCTCG GAGCAGCCTG GGAGCATCCT GGGCCCGAA TGTGCTCCT  
 GCAAAANAGT ATTTTNTCCC TACTTCAAAA AGGAGCCGGT GTACCAGCTG CCCTGCGGCC ACCTCCTGTG CCGNCCCTGC  
 CTGGGTNAGA AGCAACGGTC CCTGCCCATG ACGTGCACAG

SEQ ID NO:1841: (Length of Sequence = 332 Nucleotides)

GTGTGATTCC ATTTATATGA AATGTCCAGA ACAGGGAAAA CCTATTNAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT  
 GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TGATTGCTTC ACGGGGTGAT GACAGAATGT TCCAGAACGT GACAGAGGTG  
 GTGCTTACAC AACTTTCTGG ATGTACTAAA TGCCGCTGAT TGTTCACTTT CAAGTGATTG ATTTTTAGGT TATTTGAATT  
 TCATCTCAAT TAAAAACCC AAACACGCAA ACTGCTCCCG CCAGCTTCAG CCCCAGGCA GACGGCGCAN CCGTGGGAGG  
 GATGCTGAGC CA

SEQ ID NO:1842: (Length of Sequence = 246 Nucleotides)

GCTGTCAAG GCAGAGTTTA CTGAACININ AGTTTCTCCTC TGACACACACC GGGCATGACA CTTTCAAGTC TGNCCAGCAG  
 TGGGTCCAGA AAGTACCCTG TGTGCTTGG ACGCAGAGGC TACAGTCTCN ACTGTGTGGC ATGGGAGCCT TCANAGTGCC  
 CTCGGGAGCT GCCCCTGGTC TTGTCTGNA AAGGTGACTG GGAGGNTAGA AAAAGCAGCG GGCTGGCATT GTTTCGGGG  
 TGGGT

SEQ ID NO:1843: (Length of Sequence = 313 Nucleotides)

ATTTATTGCA AACAAAATG AGGTAAAAGA AGCTGACCCA GAACCCACGC CCGTCCAGGC TGGGGAAGTC TCTACTCGCC  
 CCACACCAGG CCCCAGCAC CGCGGGCCCG AAGCAGCCCC CAGAGGACAG ACGGGCCCTG CGCACTGAGG TAGCTGCATC  
 TTAAGCCCC ATGAGTACAA CTGCCCAGGG CTGCCCAATT CCCAGAGGGG AGGAGGAGAG AGAGGCAGGC AGGGGGAGCC  
 CCGGCTTCAG GTGGGGCACA CCCCANACCC TCAACAAACC TTCCAGCCTC TTCGGGCTGG GGCACCTCCT GCC

SEQ ID NO:1844: (Length of Sequence = 274 Nucleotides)

CTTCGCTTCT NAAACCAAAA CTCCAGCCGC TGCCAGTGG GACTTGGTGC CCCGNCGCTG CCAGAATGCT CCACTGCCAG  
 CCGCCCCCCC TGCTCGGTT TCCCTTCTGT TTAGTGGCGA CACAGGCACC CAGCTTTGGG GTGGTGTGA CGCTCCAGG  
 GGTGCCAGGA GCCACTGGGA CAGGGTGAGG CTCCAGACG CTCTCGAGG TGCCAGCTC TCCAGGGAGC TTCTGNCCTA  
 AGGNGTCTG AGGGATCTGC TCCTTAACCN CCCA

SEQ ID NO:1845: (Length of Sequence = 441 Nucleotides)

GGGGAGGGGC GCACACACGA AGGGAGGTGT CAGCCGGGAC CGGAAATCCA ACACGGCAAA GGAAAAA CACAACCCGT  
TTCCCAAAGG GAGGAGCAGC AGGAGACGAT GAAGAGAAGG AACAGAACTC TCTGGGCAAT TCTGATGTAC ACCCAGGTAC  
AGTGGGGATC TCTTCACTTG ATGCCCCAAA AAAGGGATAA ACAAACAAA AACGTGAGCA GCCAGCTTCA TTCTTTCTC  
TGCTTTGTCT CTTGCCAGTG ACTTTGGGTT TTGTGTGAA GCTCTCTTAA TTCTTTGACC TTGAAGTTCC TCAACATCTA  
TCCAGTAGC CTCAGTTTCC ACTTTGCCTC AACTAACATC TTGGACTTTT TTCAGTCTTG AACAGGCTA AACCTTTGAG  
ATCTTGAACT CGGACTTCAG CCTACTTAGC TTGATACTAC C

SEQ ID NO:1846: (Length of Sequence = 255 Nucleotides)

ATGAATTCAT TGTGTATTTA TTAATCAGAG TTAATCACTA CCTACCAAAT GCTATCCGCA GAGTTAAAGG ATTAAGTACA  
TAGGTCTTTA TTTAAACACT GATTTTTTTT TTTAAATATA TACACACAAA ACTTAGTTCA GCAAGGCTTC ATGATATACA  
CCAATTCCAA AATAAAACAA TCAAATGGTC CNGGNGTAGA ATGCCAGATT CCTTTTATCA TCTGCGAGGA AAAGAGAAGC  
AGGATGAGGA AGAGT

SEQ ID NO:1847: (Length of Sequence = 312 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCAC CTCACTCG CAACATTCCT CCCACATCCA CATCCACGAC  
GGAGCCAAAT CTCATTGTIN ACCCTCAGTC ACCACCCC CATGGAGC CACTGGTTAC GNCATGGATG ACAGGTGTCA  
TGCACAGGGA GAGAATTTNT CCCGGATAC CCTTGAGG GGNCCAC CCCAGGCTA GGGTGGGAGG ATTTAGAGCA  
GTGCAAGAAA CCAAGGAGGA TGGAGCATCC AAAGGAAGG AGGCAGGC TNGGGGATTG AGGCAGGAA GGGCT

SEQ ID NO:1848: (Length of Sequence = 311 Nucleotides)

CCACTGGCCT ACATTATAGA AGTCTGTAT GCGGACCCTG CCATTGTCAT CATGGACGCA GGCCATGACC ATCATCACCA  
CCCAATTTNT TGTCTGAAGA GAATCCAAC GCTACCCAAC CATCTGTGTC TGCACTCAGC TCAAATTCTA CATCAGCCCC  
TATCATCCGG TAGCTGAGGA AATAGTCACA GGTCTCTGCA TTACAGCCTG GTTTGCCATA TCTAAAGCAT CCTTAGTTT  
TTCCACAGTC GTCCACTTTG ATTTTGGCAA ATGGNTCCAC AGGAGAAGCA GCAGGGCTNN GTGTGGGGTG T

SEQ ID NO:1849: (Length of Sequence = 318 Nucleotides)

GTGAGTCCCC CAAGAGGGGC CTCAGTCACG AATGTCGATG ACCAGTGGGC ACAGGTGGAG TGAGTGCTTG ATGCCCATGG  
TGAAAGCAGG GATGTGGGGC TTGTGCACAG TGANCTGCTG GACCTCGTGG GAGCCGGGGC CAGGCOGTGG CGTGAGGTCC  
AGAGGGTAGG CGAAGGCTTG GCCATGCTGT AAGTAGGGCT GCGGTTCTNA TAGATGGATG GCTCAGGTGG GCGGTACGTC  
GTAGGTCCAG GGCTCCTG CACATCCTCC TTGTAGANCC AGTTCCTGTC CCTGGAGGCC AGACTNTAGC AGGGAGCA

SEQ ID NO:1850: (Length of Sequence = 406 Nucleotides)

GGAAGCCACT GATTTTCCT CCAGTATGAT GATTTACTTT AAAAATGAAC CCAGAGGGAC GGGCATGGTG GCTTATGCCT  
CTAATCCAG CACTTCAGGA GGCTGAGGCA GGCAGATCAC CTGAGGTCAG GAGTTCGAGA CCAGCCTGGC CAATATGGTG  
AAACGCTGT NTCTACTGAA AATATAAAA TTAGCCGGGT GTGGTGGTGT GCACCTGTAG TCCAGCTAC TCAGGAGGCT  
GAGGCAGGAG ACTCACINAA CCTCGTGGT GGAGGTGCGA ATGAGCGAG ATTNCACCAC TGACTNCAGC TTTGGCAACA  
GAGCAAAGAC TNCGTCTTCA AAAAAAATA ANAAGGGAAA AAAAACCNG NAAAAGCTTT TTTATTGTTA AAAACAAGTG  
GGTCAC

SEQ ID NO:1851: (Length of Sequence = 328 Nucleotides)

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CTGAGGGGCA TTTTATTATTA TAAATTTAAT ATGGTTGATT AATGAAAAAT GACAATGAAG TACCAAGAAA ATGTTTGTCA  
 ATATAAAAT TTTAGCAGCA TTTCATAGT TTCAGGCTCC AACATTAGTC GTACTTCCTC CCTCCCGCTA TCAAAAAAAG  
 AAGAGACTCC AATGGGATGG AGTAGAGCCT GGGGGTGTCC AGCTTTGTGT GGGCCTCAGA GAAATACTCC ATCCAGCATC  
 CAGGATTCTC CCTCCCTCTC ATCCCTGAAG TGCTAGAATG TCAAAGCACA GAAAAAGCCT CCTTTGTGCT GACATTGGAG  
 ACAAGGAT

SEQ ID NO:1852: (Length of Sequence = 174 Nucleotides)

GGGCAGGACG GCTCTNGGCC CTTCCTGGCT GACTTCAACG GCTTCTCCCA CCTGGAGCTG AGAGGCCTGC ACACCTTTGC  
 ACGGGACCTG GGGGAGAAGA TGGNGCTGGA GGTTCGTGTT CCTGGCAGCA GGCCCCAGCG GCTTCTGCT CTACNAACG  
 GAGCAGTAAG GACG

SEQ ID NO:1853: (Length of Sequence = 252 Nucleotides)

GAGCCATGCA CACACACGGC CGCATAGTCA CACACGCATA TCTACATGTC CCCCCACAT ATACACACAC ACATATACAT  
 GGACCCATGC ACACACACAG CTGGATATTC ACACACACTT GCACATCCAC TCCATATACA TAGACACGCA CAGACACAGC  
 TGCATGTTCA CACACNGGA CGTGACACG GACACAGACA TGCATGCATA TGCGCACAGG TGTGTACAGC CTCAGTGGTG  
 GGGGTTGGCT GT

SEQ ID NO:1854: (Length of Sequence = 288 Nucleotides)

GGAAGGAGGG CTAAACAATG GTCTGCAGCT CAGTTACTCC TCATCCTCGC CTGGGCGGGG CCAGCATCCA CTCCCCTTCC  
 TGTAAAGCAT TTGGAATTC TTGGGAAAC AGCCCTGCCC TCTGCTCTGA TCCATGTGTT TTGAGATCTC ACAGTAGCAA  
 GTGACTCATG TTGGTTCACT GATTCCCAGA GGTGATTCA AGGATGTCCC CAGCTAGACC CAGGATGGTG GACTCCAGAT  
 TGGGGCACTG GGCAGTTTCA CATCCTCAAG GCTTGGCCAT CATCGGGG

SEQ ID NO:1855: (Length of Sequence = 293 Nucleotides)

AAAATGCTTG TTGATATTTT AGTTATTAAT TCATATTAAC TTTGGCTGAA ACTTTTAAAT TCTATTGTGA ATAGTCAAGT  
 AAAATTTAGA TTGTTACATT CTGGGTTAGT ATTAGATTGT TTTTAAGATT GTTTTAAACA AGATGTTTTT AAGATGAGTT  
 TTAAATAGTT CTCTTAACAC AAATAAAGCT TAATATGAGT ATTTGAAGGA AATTATCCCA AACCATTCCA GTTCTTGGCT  
 GTGAAAGGCT TTTCCAGGGC TAATAAGTTT TCCACTTCAG CCGTAAGTAG GTG

SEQ ID NO:1856: (Length of Sequence = 308 Nucleotides)

ATCTTAGCAG AATCTTGAAA AGCCCAGAGA TCCAAAGAGC CCTTCGAGCA CCACGCAAGA AGATCCATCG CAGAGTCCTA  
 AAGAAGAACC CACTGAAAAA CTTGAGAATC ATGTTGAAGC TAAACCCATA TGCAAAGACC ATGGCGCGGA ACACCATCT  
 TCGCCAGGCC AGGAATCACA AGCTCCGGGT GGATAAGGCA GCCTCTGAGC CAGCGGGCAC TTACAAGCCA AATCAGATGA  
 GAAGGCGGCG GTTGCAGGCA AGAAGCCTGT GGTAGGTAAG AAAGGAAAGA AGGCTGCTGT TGGTGTTA

SEQ ID NO:1857: (Length of Sequence = 299 Nucleotides)

GGGGAAAGCT AATTGGCAAT AATCCTTGCG GGAAGGTGAG ACTCCTCTCT TACAGATCTA GGGGAAGCCT GGTAAAATGA  
 TGGCTCTTTG GAAAATGCCA AGCTCCTTCA GATTCCATAC CCTCTCGGGC CCTCAAGCAT AGGCAACGAA CTGTCTCTG  
 GCTTCACGNT TTCTCATGTA ATCAAAGCTC TCATGCATGG CCTGGAATTTG TAAACACATG CTGGCTGCCA GCAGTGGCAA  
 GTTAGCCTCC TGACCCACTT CTCTCTGCT TTCACTCTGG TGTATGAAGG GGGATGAGG

SEQ ID NO:1858: (Length of Sequence = 295 Nucleotides)

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TAAGACTTCC TGTTAGTAAA AGCTACCTCA TGAAAAGTAT TGATGTTATT TGCCAACATT TAGACTAGCT TTTGTTACCG  
TTTCAGTTAT TCAATTTAGT CAGCACATGT TTGAGTGTCT TACTGCAGGT GAATAATCCA TGATTCTCTGC CCCAGAGTAG  
TTCATAAGAC TGGTAGGATA CATAGATTTG TAAATAAATA ATTATAATTC TGGGCAGTAA GTGCTGCTAT AGAAGTCTCT  
ATAAAGCAAT GTGCAACAC AAGAAAAGGA GCCGTTAATT CCTTATAGGG AAAGG

SEQ ID NO:1859: (Length of Sequence = 326 Nucleotides)

CTTTATTTAG TGCTGGGGCT TTGAAGCAA ATGTACCTGA GTTTGAATCT CAGGGATAAC CTTTGTACTG TGGCCCTGGG  
TAAGTTACTC ACTGTCTCTG AAACITCAAG TTCCTCATAA ATAACCTAAG ATGGACAATC ATAACCTCTCT CTTGGATTGA  
GGTAGGAGAA TATGGTGGAG GCAGGGAACC GAAGGCCATT TCACTCCAAC TTCCTAGAAC TAAATTAAAA GGAAAACCCCT  
AATTTTCCAT GCCTAAGTAA CAAAAGGACC AAAGGTTACT CCGTTTGCAA ACTCCACCT TTTCTGCATG GCAGATGGGA  
AGTTGG

SEQ ID NO:1860: (Length of Sequence = 294 Nucleotides)

CCACCCCTAA AAGCACCTGG CCCCGCTACA GCAAACCAGG TCTGTCCATG CCGCTGCTGG AATCAAAAAA AGGCCTCTCC  
TTCTTTGCGT TTGAGCACAG TGAGGAGTAC CAGCAGGCTC AGCACAAGTT CCTGGTGGCC GTGGAGTCTA TGGAGCCGAA  
CAACATCGTG GTTCTGCTCC AGACGAGCCC TTACCACGTT GACTCACTCC TGCAGCTCAG CGATGCCTGC CGCTTTCAAG  
AGGATCAGGA GATGGCTCGA GACCTCGTAG AGAGAGCGCT GTACAGCATG GAAT

SEQ ID NO:1861: (Length of Sequence = 183 Nucleotides)

TGAAGACTCC TAATCTAGTG CCTCGAGAAA AGCAGGCAAC AGAGGCCTGA TGTCTGACAT TGACTCTTTG GAAGATTAAA  
CTTCTCACA GATTTCNATA ATNACTTTGG AAATNATGAC TGATGCCAG GCTGTTCCTT GGGTGGACAG TTGTCTTTT  
TTTTTTTTT TTTTTTTT TTT

SEQ ID NO:1862: (Length of Sequence = 296 Nucleotides)

TTGGGCTTCT TAAAGTTCTT CCCATCCCTC CTAAGGTCTA AGATGATGCA TTAAACACAG AGGATGCCCA ACAGTGGCTG  
ATGGAATTAC CAAGTAAAAT CTAAGAGGTA GAAAAATGTG GTAGTTTITA AATTTTATTT TATTAGTATG CAGGTGGGAT  
TCAGAGACGT AAGATCTTAG CCTTTATTTT CAACATCTCC CATGCATGTC AACAAAGATT ATCAAACACA GGAAGTGAAT  
AAAATACTAT GTAGACACTG ACCCTCTTTA TATAAAATGT GATTGATCAG GTCTGG

SEQ ID NO:1863: (Length of Sequence = 259 Nucleotides)

CAAAACAAAA AGGGGCTCAA ACCAACAGGA AGTCAGCCCC ACCGCAAGCC GGACTACAAC TAACTGTGTC TCTCCACGCT  
CAGGCGTGGG AGCCAAGGCT GTGCCAGGCC TGGCCAGGCC AAGCAGGATG ACAGCAAACG CATTCTGAAC GTNTAGCAAT  
CAGGTCCCTT GTAAATGTGCT TGGAGAGINT GGACAAGGGC CGAGATGACG AGCTATGAGC TGTGGAAGGG AATGGGGGAA  
GCAGAAGGGC ACAAACAGA

SEQ ID NO:1864: (Length of Sequence = 290 Nucleotides)

ATCCTTACCA ACAATGCTTC CCAACTGCCT CAAAGCTCTC CTAAATGAGA ACATAGTTCT TTCTGAGCAA GGTCTGTGG  
ACCATGAAGA ATGTCACCAA GCTCCCCTCA GAGTCAGCGG GAGCTCAGCC AAAGCACAAG TGCACTGCCC AGCTCCTCCC  
ACTCTGCACC TGCTGCCTCA NACTCCCCAC GCTGAGCCCA GGCCCTTACC CTCTGAAGGT GTTCCCCTAT TGATTCTGAC  
ACACACACCC CACAAGAACC AGATGATCTA TGNCATACAG CATTTAGCTA

SEQ ID NO:1865: (Length of Sequence = 236 Nucleotides)

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CATTTCTGTT ACATTGAGAC TTCAGTCACC AACATCTGGT GGCAGAGATA CAGGTGTATG AAACATTTCT ATTTACCCAA  
 ATATGCCAGT TCCCAAATAG GATGACTGCA TTTAGTGTAA AACTGGCTTT TCTCATTAGA TACTCTAATT GAGGAATATT  
 TAGCTTCTTG AATAGAAACC ATCCAAATGA TGTTTTTTTT TTGATATGTC TGTAACATA AAAATCAGCA AATAAG

SEQ ID NO:1866: (Length of Sequence = 424 Nucleotides)

TACGGGAAGG CGGTGTTTGG AGGCTGGAGC CGTGGCAACG TCATTGAGAA AATGCTCACA GACCGGCGGT CTACAGACCT  
 TAATGAGAGC CGCCGTGCAG ACGTGCTTGC CTTCCCAAGC TCTGGCTTCA CTGACTTGGC AGAGATTGTN TCCCGGATTG  
 AGCCCCCAC GAGCTATGTC TCTNATGGCT GTGCTGACGG AGAGGAGTCA GATTGTCTGA CAGAGTATGA GGAGGACGCC  
 GGACCGGACT GCTCGAGGGA TGAAGGGGGG TNCCCCGAGG GCGCAACCCA GCACTGCCTC CGAGATGGAG GAGGAGAAGT  
 CGATTCTCCG GCAACGACGC TGTCTGCCCC AGGAGCCGCC CGGCTCAGCC ACAGATGCCT NAGGACCTCG ACAAGGGTCA  
 CCCCTCCTCC ACCCTGGACT GGCT

SEQ ID NO:1867: (Length of Sequence = 256 Nucleotides)

AAACAATTGA AATCCACAAG AAATTACTAA CAGCACGTGT TTACGTTTTA TCCTGAATCA TACATTTTAA CAATTCACAG  
 CTACAGGAAA TCTAGAACAA AATCAAATAT TCATCAGTGT GGGTTGAAAA GTTGAAGAT TTTCATCTT ATTGAAAAGA  
 ATTTTCAAA AATGTTTCTG TACAAATGAA TGAATTGCA CCAGGCTGCC CATGGACACC AGGTGTGGCC GCTTCCCAAC  
 GGTCACCAC CAGCTT

SEQ ID NO:1868: (Length of Sequence = 297 Nucleotides)

CAAGGTTTTT TTTTATTTGT AGCTATAGCT ACAACTTGGC AGCATGGGGG AGGGTGGGAA TGTCTGGAG GGTCTCCAG  
 CCTCCGCAA GCAGAGTACA AAGGCTGCTC GGGGGGCCGG CCGAGGCGC GGNTGCAGCA GTGNAAGCAG CAGCACTAAA  
 CCTGGTGCCC CCTCAGGTG GGGTGTCTGG AAGACGGTGG GCAATCCCTG CAGGATGGGC GAGGACCAGA CCCAGGGCG  
 GGGATCCTGC ATCCCTAGAC CATGTGGGT CCTGGGTCAN GGCACCTNGG NATGCTA

SEQ ID NO:1869: (Length of Sequence = 470 Nucleotides)

CAGACATCTG GAGCATGGGA CTGTCTCTGG TAGAGATGGC GGTGTTGGAG TATCCCATCC CTCCTCCAGA TGCCAAGGAG  
 CTGGAGCTGA TGTTTGGGTG CCAGGTGGAA GGAGATGCGG CTGAGACCCC ACCCAGGCCA AGGACCCCCG GGAGGCCCTT  
 TAGCTCATAC GGAATGGACA GCCGACCTCC CATGGCAATT TTTGAGTTGT TGGATTACAT AGTCAACGAG CCTCCTCCAA  
 ACTGCCCCAGT GGAGINTTCA NTCTGGAATT TCAAGATTTT NIGAATAAAT GCTTAATAAA AAACCCCCGC AGAGAGAGCA  
 GNTTTTNAAG CAACTCATGG TTCATGCTTT TTATCAAGGG GATCTNGATG CTGAGGAAGT NNGATTTTTT CAAGGTTGCG  
 TCTGCTNCAC CATNGGGCTT TAACCAGNCC CGGNACAACC AACCCATGGN TGNTGGNGTT TAAGNGTTTT

SEQ ID NO:1870: (Length of Sequence = 344 Nucleotides)

AGAGATTAGA TTGTAAAC ATCTAGGTTA AAATGGTTAA AAGGATTTTC ATACAATTTT AGGCACTATA CACGTTGTTT  
 ACAACAGCAT TGGTACTTGG ATATGGGGAA AGATAAATCC GACATTTTAA TATCTTGATC AATTTGTGAC ATTCAAAATA  
 ATTCCATTTA AGAAACATTA ATCAAACTT AAAGAGACAT ACCACTAAGT ATCCACACA GTATACTGAA AATAAATATA  
 GNAATAACA CAGAAGTCTA CAGNTACCA CAGTAGACAG ACTGGTGAAG NCCCAGCTTT TCATGGGCAG TNAAGGGCTC  
 TGGGCTAGAT TTGGGTGTCA ACTG

SEQ ID NO:1871: (Length of Sequence = 278 Nucleotides)

GGATTTATTG TCATTCCTCC AAGGTCAGCA GGGGAAGGGG ACACCAGCCA CACTTCACCA CAGGCATAGG TGGCACTGAG  
 CCACCTGGCA CTATCTCCAC GTGCTCCACA CGGAGGGGTG CCTTCTCACT GGCAGCAGCT GCACTTCTCT GCTTCTGCCT

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CAGCTGCCTC TCCGCCCTTG CACACACAGT CCTTGGCACA CTTCTCACAC TNCGCAGGCA GCAGGAGCAG CAGCTCTTCT  
TGCAGGAGGT GCATTTGCAT CCTCGCACT TGCAGGAG

SEQ ID NO:1872: (Length of Sequence = 271 Nucleotides)

CTTGCCATCT TCACAGCCAG AAGCTTCCTT GCTTCATGCG CAGACCCTCG TGACTCCCTT TCCCTTATAA GGGCCCCCAT  
GATTACTCAG GGGCCACCTC AACCATCCAC GGTTCATCTCC CCACCACGAA ATCCTGAACT GAAGCACAGG CGCCGGGTCC  
CTTTTGCCAC GCAAGGTAACT ACTTTCCAC GTCTGGGGT TCCAAACCTG CACATCTCTG GGGGCTGTTA TTNCACCCAC  
CGTCATCAGT GAGGCGCCTT NAGGAGGGGC T

SEQ ID NO:1873: (Length of Sequence = 332 Nucleotides)

CAGGGTATAG TGCAGTGGCG CAATCTCGGC CCACCACAGT CTCGACCTCA TGGGCTCAAG TGATCCTCCC ACCTCAGCCT  
CCCAAGTAGC TGGGACTACA GGCATCCTCC ACCATGCCCA GCCAATTTT TGCATTTTTC ATAGAGAAGG GGCTTCACCA  
TGCTGCCCAG ACTGGTCTCG AACTCCTGGG CTCAGCCAT GGAATTGCCT TGGCCTCCCA AAGTGTTAGG ATCAGAGCCG  
CGAGCCCCTG GACCCGGCCT ATAGTTTTTG TTTGCTTTG TTTTGTTTT TTGAGATGGA GTCTCACCTT GTCANCCAGA  
TGGGAGTGCA GC

SEQ ID NO:1874: (Length of Sequence = 317 Nucleotides)

CTCTCCACCT CAACCTCCAG CCCACCTCCA GGCTGGGGAA GGGGCTGAGT CTTCCCTCC CATACATACC TCACCCGGCC  
CCCAGCCAC AGAGAGGCTG AGGGAGGGGC TCTGGGTCTT CCTCCATCCC TGTACCTGCT TCTTCCCTCT TCATTTCCAC  
CTTCTAGATC TTTCCCCCA CCCAGCCAC CTCCAGGCTG GGAAGGTGA GGAATCTTT CTTCCACAC CCTACCCAC  
CTCACCTGCA GCCTGTGCCC TGGGCCAGGA GAGGCATGGG TGAACAACA GACCCACAAC CCGGACCTT GCAGGCT

SEQ ID NO:1875: (Length of Sequence = 185 Nucleotides)

GIGTTCACC CACCTCGGCC TCCCAAAGTG CTGGGATTC TGGGTGAGC ACGCTGCGCC TGGACAGTCT GCCCCTAGAT  
GAGTTGCCCA GCACGGTACA GCTACTGCCT GCCCGACCC CAGCCCTGA TTCTACCGCC GCTGGCAGG GGGACGGCCA  
GGGAGAGGTC CAGCCGCGG GCAAG

SEQ ID NO:1876: (Length of Sequence = 214 Nucleotides)

CCTGGGGACA AAATAGTCAG CAAATTCTCA AGGGGAGAAA ATAAAGTACT TCCCTTCTGT TAAAAAAG TCAAGAGACA  
AATCTTCTT CCCCATTCT CACTAATAGT TATTGAAGG GAAAAAAA AACCCACAA CTTTTTAAAC TAAAGATAAA  
AACAAATGAA AATGAATAAG ATCCAAAGAA TGTCTTTTGT TACTCTGCCT TATG

SEQ ID NO:1877: (Length of Sequence = 340 Nucleotides)

TTTGAAGAAG AAGAAGTGA ATTATCAGT GTGCCTGTCC CAGAGTTTC AGATAGTGAT CTGCCAACA TTGTTTCATGA  
CTTTAACAAG AAACCTACAG CCTATTTAGA TCTTAACCTG GNTAAGTGCT ATGTGATCCC TCTGAACACT TCCATTGTTA  
TGCCACCCAG AAACCTACTG GAGTACTTAA TTAACATCAA GGCTGGAACC TATTTCCTC AGTCTATCT GATTTCATGAG  
CACATGGTAA TTACTGATCG CATTGAAAC ATTGATCACC TGGGTTTCTT TATTATCGA CTGTGTCATG ACAAGGAAAC  
TTACAACTG CAACGGGAGG

SEQ ID NO:1878: (Length of Sequence = 326 Nucleotides)

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GAAAAACAAG GAAATAGGC AACAACTGC AATGGACACT TTCTCTACA GAACCTTTTC AACCTGAAT TGAATTGTTT  
CCTATTCAAT TNCTAATAAA AAGTTACTTT GCAAGATATA AGGAAATACT GTCCCAAAGA TTTTCACTAG TCATTCAATC  
CATTAAATAGG ATTTGAAAAG GCATCATTAC ACAGGGTTGA AAATACTCTG GAATGAGACT GCTTTACAGT CAGAATGCCT  
GAGTTTTGAG GCACTGTTAC TTCTAAACAT CTCTAAGTTT CTATTNCTC ATCTAAAGGA GTAATATTAC TTTCTTAAA  
AGGTTG

SEQ ID NO:1879: (Length of Sequence = 222 Nucleotides)

GAAAGGGAGA GGTTGCAGCG AGCCAAGATC GTGCCACTGC ACTCCACCT GGGTGACAGG GCAAGACTCC ATCTTAAAAA  
AGAAAACCCA GGAGTCTTTG GTTAATGTAG TGCAGGACTC TGAGCTCCCG GGAGGACCCT TCCCTCCAG ATGAAGTGTG  
ATGGACCAGC CCAAGGAGG GGAGAGAGCA CTINGGCCAT AGTGGTGGTG GATCTTTCTA AC

SEQ ID NO:1880: (Length of Sequence = 244 Nucleotides)

GACATGAATG GTATCCTCCT GGGGTATGAG ATCCGCTACT GGAAAGCTGG GGACAAAGAA GCAGCTGCGG ACCGAGTGAG  
GACAGCAGGG CTGGACACCA GTGCCCCAGT CAGCGGCTG CATCCCAACA CCAAGTACCA TGTGACCGTG AGGGCCTACA  
ACCNGGCTGG CACTNGGCCCT GCCAGCCCTT CTGCCAACGN CACGACCATG TAAGCCCCCT CCGCGGCGAC CTCCTGGCA  
ACAT

SEQ ID NO:1881: (Length of Sequence = 156 Nucleotides)

GTACAGGGGA GAGTTGAGCT GTGACAAAGT CAAACACAGG CCTTGGCCAC CCACAGGAGC TCTGCAGCTG GGGTGGTCTT  
GAAAGTTGTC TCAGTGAAGG CAAGGTGCTG AGCTTATTAC CCCAGCAGTC ATTGTATTTA GGCTCCGTGT GGTACC

SEQ ID NO:1882: (Length of Sequence = 210 Nucleotides)

TTTTTTTGA AACGAAGTCT CAGTCTGTCA CCCAGGCTGG AGTGCACTGG CACGATCCCG GCTCACTGCA ACCTCTGINT  
CCCAGGCTCA AGCTAGTCTC CTGCCCTCAG TGCCCGAGCA GACGGGACTA CAGGCACCCC CACCACGCCC GGCCAATCTC  
CAAATGGTTC TTTTTTCCG GAGTAGTAAG TTACAATATG GGAGATTATT

SEQ ID NO:1883: (Length of Sequence = 214 Nucleotides)

GTGATGAATA CATCCAGTTT TCCAACCACA TTCCACCAGG TGGGTGTTTG GCTGTGGGAC GCATTATGTA ATCTTCGTTG  
CCAGGAAATT TACCTTCTTA ATTACATTTT GCAAATGTTT ATTTGAAGCC GCCTTCTTGG AGCTCACAGT AACTAGGAGG  
TGGCTGCTGG AAGCCCCAGG GCACCGTGGG AGGGACAGGG GAACGTCCCA GACC

SEQ ID NO:1884: (Length of Sequence = 211 Nucleotides)

ATCTTTGCT CTATGTGCCA TCACCTGGAC ACTCTAGGTA ATACCCCTTG TTGGGCAGGG GTGAGCTCCC AAGGCCTCAG  
GCAACCCAGC TCCCATGACT TTGCTGGGCT CAGCCACAT AACTGTTCTC ACAGGATAGA GTTGTAACCT GGTGCTTACA  
GCTTTCTG GGCAGTGTG CATGCTGCCA GTGGCTGCAG CAGCAGCCCC A

SEQ ID NO:1885: (Length of Sequence = 212 Nucleotides)

ATTAGCTGAA TTCGCGTGTG GCGGTTTGGG TAGGCAAAGG AGACATCTTG GAACTGGACA AGGCCCTCCA AGTGTAAGGG  
AGTCAACAGA CCACTGGGTG GGCAGCGAGG GGIGCGGTCC AGGTACTCAA ATATTTTCTC TGAGGAGCCC ACAGCCTTCT  
GTACTCTGGG GTAGATGGAG AGCAGTACCT CCACAGCCTG GTGGAAGTGC AT

SEQ ID NO:1886: (Length of Sequence = 208 Nucleotides)



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CATCCGCATA GTATTTACAT CATGGGTATA GGCAAGTACT ACAAATCAGG NCTTTNCCTT GGGGATGGAT GTTTGGAGCT  
AGTTTACCAG CACACCAAGT GGTAAAAGTG AACAAATACT TTTTGTATCC CACAGAATCT TAAAAAATAC TTTACTTGA  
AAATGTCTCT ACTAAGTAAT CATATATATA TATATATNTG TATATATA

SEQ ID NO:1887: (Length of Sequence = 332 Nucleotides)

CTCGTTCACT GCCCGCCAAC TCCCATTCCA ACTTCCTTTT TACACTGGAT GTTCTATCA CATCTGAGG ACCACTAACC  
CACCAGCAAG TCTCCCCCTG ACACACATTC ACGTAGGTCC ATACCCCTCA GAGTCCTAAA GGGTTAATGA GAAGCCACCT  
CAGCTTTGGT GAATGGAGCC CCAGCCCCAA ATCCCTCCC CTGCAAATA TGGGACAAGT AGGGAGAGTC TGATGGAGGC  
ACCAGGACAA CTACAACAAC CTCCTACCCC TCAGCTATAG ACACCTAGAT CAGGACAGAG GGATGCATAT GCCCTCTCCA  
CCTTAACACC AA

SEQ ID NO:1888: (Length of Sequence = 224 Nucleotides)

AAGAGCTGAT TGAGGCTGCC AAGAGGAACG ACTTCTGTAA GCTCCAGGAG CTGCACCGAG CTGGGGGCGA CCTCATGCAC  
CGAGACGAGC AGAGTCGCAC GCTCCTGCAC CACGCAGTCA GCACTGGCAG CAAGGATGTG GTCCGCTACC TGCTGGACCA  
CGCCCCCCA GAGATCCTTG ATGCGGTGGA GGAAAACGGG GAGACCTGTT TNCACCAAGC AGCG

SEQ ID NO:1889: (Length of Sequence = 261 Nucleotides)

CACTTTACTG AGTCACACCC AGCTGTAAAC ATGTACCGT GAGANTCCCG CCCCCACCC CCAGGCCCGCA CAGTCGCGA  
TGAAATGACA GGGGAGCGGG GAGGGTCGCC GGAGCGGGTG CCAAGCAAGG CAGGGCAGGC AAGTCAGCA GGCGCTGAGT  
TTCCGGGAGG AAGCCCGGAG GAGGTGGGGT GGGGCAGGAG CGNGGGCTGG GGACCGGCC GAAGACCAGG GGGCCCAGGA  
AGCCTCTTTT CGAAGGNT T

SEQ ID NO:1890: (Length of Sequence = 312 Nucleotides)

CTCGGAGACT ACGAGACGGT GGTCAAGGTG AAGCCCCATG ACAAGGATGC CAAAATGAAA TACCAGGAGT GCAACAAGAT  
CGTGAAGCAG AAGGCCTTTG AGCGGGCCAT CGCGGGGAC GAGCAACAAG GCTCCGTGGT GGAATCGCTG GACATCGAGA  
GCATGACCAT TGAGGATGAG TACAGCGGAC CCAAGCTTGA AGACGGCAA GTGACAATCA GTTTCATGAA GGAGCTCATG  
CAGTGGTACA AGNCCAGAA GAAACTGCAC CGGAAATGTG CCTACCAGAC AGAGAAGATT ACAGTATGTG GG

SEQ ID NO:1891: (Length of Sequence = 298 Nucleotides)

CCTAAAGGCC AGGCAAGGCT GATTCTCCAC TTCCACATGA GACAGAGCTG ATTCTGCAGG GAAACGGCTG GGGAGGCTCC  
ACCTCTTTCC TCCCCACAAC CATTTACTGG GAAGTTGTGT ATACTTGGCA GTNTGGGAGG AAGGTACTTG GAAGACCTTG  
CCAGCCATCT CCCACCCAGA CTCTTCTCA CCAGCACAGT CTTCAAGGCT TGGTGGGAAA GGTGTGTGGG AGTGGAGAAA  
GACAAAGGGC CTTCTTNAAG GAGAGGAGCT GCAGAGAGGG GCAAAGGGGT TCCTAGCC

SEQ ID NO:1892: (Length of Sequence = 333 Nucleotides)

CTCAAGGTC ATCCAGTCCG TCGCTAATTA TGCAAAGGGT GACCTGGACA TATCTTACAT CACATCCAGA ATTGCAGTGA  
TGTCATTCCC AGCAGAAGGT GTGGAGTCAG CGCTCAAAA CAACATCGAA GATTGCGGTT GTTCTGGAC TCCAAGCACC  
CAGGGCACTA TGCGTCTAC AACCTGTCCC CGAGGACCTA CCGGCCCTCC AGGTTCACA ACGGGGTCTC CGAGTGTGGC  
TGGGCAGCAC GCGGGGCCCC ACACCTGCAC ACCCTGTACA ACATCTGCAG GAACATGCAC GNTGGCTGC GGCAGGACCA  
CAAGAACGTC TTC

SEQ ID NO:1893: (Length of Sequence = 487 Nucleotides)

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CCAGATAGAG TTTCTGTTTT TNAGTTTTAC ACGTGCCACA TCAGGGAAAG TTAGGTTATG ATTAAAGCAA GAGATGATAG  
 ATGAACAAAC AAAGAAACAA CAACAAAAG CCCATGCAAG AGGCAGGAAA AGAGGCTGAC TGGTTAAAGA ACAGGCCAGA  
 TTGGACAATA CTGATCAAGA GGGGTTTACA TTTGAAAGAA CAGTGCTTTA TTCCTCTACT GACTAGAACT AAAGGGATT  
 TGGCCGGTA CGGTGGCTCA CACCTGTAAT CCCAACACTC TGGGAAGCCA AGGTGGGCGG GTCACGAGGT CAGGAGTTCC  
 AGACCAGCCT NACCAACATG GGTGAAACCC CATCTCTACC CAAAATACAA AAACTTTTNC CGAGCGTGGG CCCGGCGTTG  
 GTTGGCTCAT ACATTINATN CCCCNCITTT NGGGGGCCCA NCCGGGCGGT TCACCTTAGG GTCAAAGGGT NCGGGGNCCT  
 TCTTGGC

SEQ ID NO:1894: (Length of Sequence = 283 Nucleotides)

GGTGTGAAG TGGGCTCTGG AGAAGCTGGA GCTGACCAAG TACGCAGACA AGCCGGCTGG CACCTACAGC GGCGGCAACA  
 AGCGGAAGCT CTCACGGCC ATCGCCCTCA TTGGGTACCC AGCCTTCATC TTCCTGGAAG AGCCACCAC AGGCATGGAC  
 CCCAAGGCCC GGCGCTTCTT CTGGAACCTC ATCCTGACCC TCATCAAGAC AGGGCGTTCA GTGGTGCTGA CATCACACAG  
 CATGGAGGAG TCGAGGGCGC TGTGCACGCG GCTGGCCATC ATG

SEQ ID NO:1895: (Length of Sequence = 234 Nucleotides)

ATGTCCATTA GCCTCATTTG TCATCTGAGG GAGCTGGTGA GAACAGCCTT GGCGTGAAGG CATCCCTGGT AGAAGTCGGG  
 GGAGATAGAT AGTCACAGTT CCCAGTTGG TGGAAATNGG ATNGGAGTAG GGAGAGGCTN GAACAGACCC TTCCCCATT  
 ACCTGGNGAA TTTTCTCTC CCAGTGCCTT AAACACTTTA TTTCATCAC AGGGGAGAAA TNCCTGTGAG AAGG

SEQ ID NO:1896: (Length of Sequence = 285 Nucleotides)

CTTTAAAGTG TAATAATATG ATTTTITAAA AGAAATTTAT TACTTGTTC AAAGGTCTTT TTAAACCAGT TTAGATTTCA  
 AGAAAAATA AATGGAAATC ATCGAAATTT CATTTACAT TAATGGTCTA AAAATAAACC AAAGGACATT ATGTGTGCAT  
 GTGTGTATAA GTGCACACAG AAATATATAT NCATATGNG ACTATATACA TGTGTGTATA TATGTGTATA TATACATNCA  
 CTTGTATAAA TGTATATACA CATATACCTA TAATGTGTGT ATGTG

SEQ ID NO:1897: (Length of Sequence = 288 Nucleotides)

GCAGGTTTAT GTTTTTATT ATGTATTINA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACTTG  
 CAGAACTGTG CCTGGSGSAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AAWCTCCCC  
 AAACCTTAAA GGCATCCTTT TCGTAGTGTG TGTCCAYAG GTATGGCTGC TGAGCACCAG GGGCTGCTCA CCATGNTCCC  
 AAGAAGCAGA GTCANGGAG CAGACAGCAG GGTATTATTA GGTGCACA

SEQ ID NO:1898: (Length of Sequence = 398 Nucleotides)

CAGAAGTAAA AGATTTTTAT TGTCTATAG AACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
 TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT  
 GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGGAAA AGGTGCATTC CCTAAGCTG AGGGGGATGG AATTTTCAGAA  
 CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CAAGCTTTGA  
 GAAAGCAATG AGCTCCACCT ACTCAGCAGA CCCACGGGTC GTCCCCCTGG ACGTGACTTA GCAGTGACCT TGCCTGCC

SEQ ID NO:1899: (Length of Sequence = 227 Nucleotides)

CATGGGGACC CGGGTTTATT TTATTAGGAA GGAAACAACC AAGCACCCCA TGTTCCTGCC CGGMACTCCC GGGGGGAACA  
 TGCCAAAMAG CCGGGGATCG AACCAGCCC ACCTGTCTGT GRGGKCCCTT CCTTCTCAGG CCACAGAAAT AAACCCGTGT

ACTTYYTATT GTTAGCACAA CATTACCAGA AAACGKTAAC GGCAGCCAAG CAGGACAGAC AGTTAAG

SEQ ID NO:1900: (Length of Sequence = 405 Nucleotides)

GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGWTCC CGAACGACTT CTCTGCCCCA GGGGAGTCCG AGCCACAGTT  
TTCTGATCAA CTGATGATTC TRACCCGCTT CTTTCTCTCT GGGGGGTAAG ACACITGTTG TTGAGCTCTG GGGATGATGG  
AGAACGACTC CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTTCCTGGG AAGAATCACA TTCGCTTCTC CCTCTAGATG  
GCGTTCIAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC CTCGAGGGAG TOCCAGACCC ATCTCTAAGT  
CCTGGAGAAG ACCCAGACCT GCTTCTCCTT GATGGAGTTC TGGTAAACCA TCTTTCATTT CAGGAGAAGA TGCAGACTAC  
TTCTT

SEQ ID NO:1901: (Length of Sequence = 244 Nucleotides)

ATRAATCATÀ TGCTAGTTTA TTTATCTTAT TATTGAGAGA TAATTTCATG ATGACAGTTA TCAATAATCA ATTACAATAT  
CAAGAAATTC AAAGAACAAA ATCTTGCGA GACTATGCTT TTGTATTGG ATTAAAGAG TATGTGATCT CATTITTCACA  
TACCAAGCTG AGAGGCCATT TAGACTATCT CTTTGCTAAT TTTTGCTTAC TGCTGTAGGG AAGAAGATTT CCAATGAMCT  
TTAG

SEQ ID NO:1902: (Length of Sequence = 329 Nucleotides)

TAAAAATAAA AAAATAAATA AAATTTTAAA AATAATAAAA ATTCACTATA TACACATATA AAGAAATAAA AAGAAGTCTC  
AGITGCAGCT ATTGTICAAA ATTAATATCC ATTTCTIWTW ATATACGGTG AATATTGCGC AATTATAGAT CTGGATTTTA  
AACCACTTAA TGAAGCGGCA ACACCAGGTG TTTTAAGGTG TTGGCATTCT TCGCTGATTT GGCTGTTCCC AATGTTTACA  
TTATTTAATC TTGCAAAAAT GGTCTGATG CACTTGGGAT GTGAAATGCT GTCCCGTTTT ATTTTTTTTAA TGTGTATTATC  
CTTGGGTGT

SEQ ID NO:1903: (Length of Sequence = 421 Nucleotides)

ATTTTATATT CCACAGTCAG GTGGGTCTGC GATASTCAIT TAATGTTAAA CGCCATCAGG GGCTCTCTCT CCCGTTTCTG  
CCAGGGGCTT TTCTGTCTT CTCTTGCTC ATCATCATCA TCGTCTTCTT CTCTCTCTG GGCAGATCTT CTCTGGTGGG  
GGCTGCTGC TGGCTCCGAG GGGGCATCCG CAGTCCGCTT GGTCTCTCTT TCCCTGCAGG TGGGCAGCTG GCCACCACTT  
CTCCGACTCG ACCCTTCCAA CAAGCATCGC AGGGCACTGT CCTCGGGGGT ACAGACCGTG GTCCACATT CGCTACCACT  
CTGTTCCAG NCATCCAGGG TACACGAGCT GCGTGTAGGC CGTGTCTCTT TGGGGCTCGA GGCTCTTTCT GCTGGTGTCT  
TTGGACGGGC GGGTAAATTC T

SEQ ID NO:1904: (Length of Sequence = 423 Nucleotides)

GTCTGTGGC CCTGTCTGAA GTGACGGTGC AGCCAGGCTG CTCCCTGCC AGCAACCCCG AAGCCATTGT GCTGGACGTC  
GACTACAAGT NTGGGACCCC GATGCAGAGT GCTGCAAAAG CCCCATATCT GGCCAAGTTC AAGGTGAAGC GATGTGGAGT  
TAGTGAACCTT GAAAAAGAAG GTCTGCGGTG CCGCTCAGAC TCTGAGGATG AGTGCAGCAC GCAGGAGGCC GACGGCAGAA  
GATCTCTTGG CAGGCAGCCA TCTTCAAACT GGGAGACGAC TTCCGGCAGG ACATGCTGGC CCTGCAGATC ATGACCTCT  
TTCAAGAACA TCTTCCAGCT TGTCGGCCTG GACCTCTTTG TTTTCCCTA CCGGTGGTG GCCACTGCCC CTGGGTTCGG  
GGTGATCGAG TGCATCCCCG ACT

SEQ ID NO:1905: (Length of Sequence = 370 Nucleotides)

CAGAACCAGA ACATTTTAC TCTTGGGCT CTGGGAAGG CCAGGCAGAG TGCAAGGTGT CCACAGGAGG GGTAAGCAGA  
GAGGAGCTAC AGGGGGCTGC AGTCTAGTA CCTGTGTGG GAGGACTGAG GGATGGTGAG TTTGGTCTCC GGAGGGGGCT

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CCAGTCCTGG TGCCCACTTC TNACANCTGC CCTCCTGAG TTCACACTGG AGTCCTTGCA GTCCTGAAAC CACAAGGCCT  
 NOCTGAACCC TGGGTCAGGA GAGAAANACT TGGGGAGGGG AAAGGACGGC GTGGGCTACC CATKACGGCT CTGAGTTCTT  
 CCTGGGGCTT GTGTCTTTTC CTGGCAGAA GAGGGCACAG CCAAAGGCAA

SEQ ID NO:1906: (Length of Sequence = 415 Nucleotides)

GTCACACCTT CATTCACTGA GGAAGAAATG CTTTCACTCT GGAATTAC AGCATCCCAA TCTGACGTTG TACCCGTTG  
 ACACGTTTG TGAGCCCCAA GTTCAACGA GCTCTTGCAA GTAAACGGAC ATTGTCACA TTTGTAGACA GCTGCTTTC  
 CAGATAAGTG GATGTTTTCT ATGTGACGAG AGATGCTACG TCGATGCATG GTGAGGAAAG GACAAAAGGG GCACTGGAAC  
 CTATTCATGA ATCTNCTAA TGAATCCCC TTGGTCTCCA ATAATTGTT GCCATCTGAG CCCATCAGCT GCTCTGCAGA  
 CAGGCCTGAT GTCGGTGAT CCACAGCACT TAAACCATT TCACCTGTCT ATTTCAATTA ACTCTTCATC AGAACTAGAG  
 TCATTAGCAT GCTGT

SEQ ID NO:1907: (Length of Sequence = 214 Nucleotides)

TGAAATCCTG TACGTGTCAA CTTTGAAATG TATGTGTGTT GGTGGGTGG TGGTATGTG ATACGGTTTG GATGCTGTC  
 CCTCCAAAT CTCATGTTGA ACTATAATCC CCAATGTCC AGTTGACGTG GTGTTGGTT CCATGGCGGG GTACCCTAGG  
 GATTCATCTG TTTCTTCAC TTCCCTTTC ATCTGAGATC CTGCTGAAA CCAC

SEQ ID NO:1908: (Length of Sequence = 410 Nucleotides)

CAGGAGAGCT GGGCACATGT CCCAGCCTG TNAGTGGCCC TCCCTGGTGC ACTGTCCCG AAACCCCTGC TTGGGAAGGG  
 AAGCTGTGG GTGGGCTAGG ACTGACCCTT GTGGTGTGTT TTTGGGTGGT GGCTGGAAAC AGCCCTCTCC CAGTGGCAG  
 AGGCTCAGCC TGGCTCCCTT CCTGGAGCG GCAGGGCGTG ACGGCCACAG GGTCTGCCCG CTGCACGTTG TGCCAAGGTG  
 GTGGTGGCGG GCGGGTAGGG GTGTTGGGGC CGTCTTCTC CTGINTCTT CCTTTCACCC TAGCCTGACT GGAAGCAGAA  
 AATGACCAA TCAGTATTTT TTTAATGAA ATATTATTC TGGAGCGTN CCAGGCAAAG CCTGGCTGTA GTAGCGAGTG  
 ATCTGCGGG

SEQ ID NO:1909: (Length of Sequence = 339 Nucleotides)

AAAATTAAAT CCAAATTTA TTAAGGATTT CAGGTACAT ACTTCAAATT TCTAGAATGG AATGGAATCA TTTTGAAC  
 GGAAAAATGG CATAAACT GACGTCCCTT AAAACTTCAA TTTTATAAAG AAAATTCTTC TGCAAAACCAC ATCCCTTTA  
 TGTAACAAGA CTAGGTATTA TCTACACCTT CACTTTGGCA ATAGCTATTT CCTAAAGAAT GAAAAAGATG ATTTTNTAC  
 TTCAGTTTAT TAAAAATGGG ATTCTATCTT TGAAGTTCAG AAAAAGCTGC ATTTGATGA ACTATGGGT AAAAATAA  
 GCACATAGTG TCTAATCAA

SEQ ID NO:1910: (Length of Sequence = 439 Nucleotides)

GGCCAGGGA GCACCAATCA CAGCAGGGC TCTGGCCAG GTGTGGCAG CCCAGGCCTC CATTGCTAA TGATTAATAC  
 ACTGTTTGGG CTGGCCAGTT TTTATGCAT GCAGCTGAC GATTGAGCAC AGTCAGGCCT TTGTATTAAT AATGAAAAAT  
 GAAAAACAA ATTCAAACC TATTCAAATG GGTCTAGTT CAATTTGTTT AGTATAAAT GTCATAGCTG GTTTACTGAA  
 AACAAACACA TTTAAATTTG GTTACCTCA GGATGACGTG CAGAAAAATG GGTGAAGGAT AAACCGTTGA GACGTGGCCC  
 CACTGGTAGG ATGGTCTCT TGTACTTCGT GTGCTCCGAC CCATGGTGAC GATGACACAC CCTGGTGGG ATGCCCGTGT  
 ATGTTGGTTT AGCGTTGTCT GCATTGTCTA GGAGTGAAC

SEQ ID NO:1911: (Length of Sequence = 342 Nucleotides)

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AATGCACCCA TTTGGCTGCC AAGAGCTTCT CACTGCCTTG CTAGCAGCCT GCCACTGTNC CCTGGCAAAT TGAAACCACC  
 CACGCAAACA CTCAAAACCC CAATCTCCTT GCTAATAAGA TACAACCACT TAACACCGTG AAAAATGCAC ATCTCCAGCC  
 TTCATTCAA AAAAGAGCTC TGTACTAAAT GCAATATGCT TTTAAAGGGG GTTTTACAGG GACCAATCTC AATGCAAAGA  
 CCAGTACCAG ATGTCTGAGT TTTGGTTACA GGTTTATAAT TAGACACAAA ATTCACCTCA CACTGGAGTT TTAATTCAA  
 GCTGGAGTTA GCATTAGTTC TA

SEQ ID NO:1912: (Length of Sequence = 380 Nucleotides)

TCATGCTTTT AATACAACT TAAAAAATC TGGACAATA GAACTGTAC AGATTTGATC AATCTTTTTG TTTTGTTTT  
 AACTAAAAT CTCTAAACAC ACCAATGTCC CATTCCAAA TATTGCACAA CATTCTGAAT ACAAACCCCT TGATTGTATT  
 CCTCTNCAC TAAAGAAAAA AGTTCATGAC CCTGCTCCC GGGCTCCTCT CCAGGCTTGC CTCAATGCCC CCTTCCCATC  
 CCTAGGGAGA AACTAGAGA ATCTATAACT CACTGCATTG AGAAAAACAC ATCATTCTGG ACTAACAGTT TTCCATTCTT  
 CAGANGNTA ATCCACCTTT TGGATTTGTT CCTGGGGAAA GAGGGGTAGA TAGAGGGATG

SEQ ID NO:1913: (Length of Sequence = 361 Nucleotides)

GAGACAGAGT TTGCTCGTT GCCCAGGCTG GAGTGCAATG GCGTGATCTC AGCTCACCAC AACCTCCACC TCCGGGGTTC  
 AAGCCATTCT CTGCGCTCCG ACTCCCGAGT AGCTGAGATT ACAGGCATGT GCCACCACGC CCAGCTAAGG CTTTGTATTT  
 TNAGCAGAGA TGGGGTTTCA CCATGTTGGC COGGCTGGTC TCAAACCTCT GACATCACAT GATCCCCCG NCTCAGCCTC  
 CCCAAGTGCT GGGATTACCG GTGTAGCCA CTGCCCTGGG CTCTCCAGTA CATTTTTAGG GGGACGATCA ATGAGGATTC  
 TCTTCTCTGA GTTACTGCAT GTGTACAGT TTATAATCCT T

SEQ ID NO:1914: (Length of Sequence = 409 Nucleotides)

GGGGCCCTTA CAACTAGGTA TGGTGGATAT TGCCCGACAG ACGGTTGAAT TTCTCTACGA AGAGAATGGT GGCATCCCAA  
 GAGACCTTTA TCTTCCACC ATTGAAGACA TTAAGAGCA AGCAAACAAG TTCACAATTG ATAAAGTTG AAAAGGTCTC  
 ACAGTAGTAA CCCGCTCTCC AGACAGCAAT AATGTAGCCA GCAGTGTCTG TGGAACTGCT CTGCCAAAAT TTGCCATCCG  
 AGGGATGCTG AAAACCTTTG GGCTTCATGG AGTCGTCTTA GATGTTGATT CAGTGAATGA ACTGGTGACG GTAGAAACGT  
 ACCTCCGCAG TGAAGGTGTG CTGGTCCGAT ACTTGGTATC CTATTTGACA TGTTGGGAAA GGGCCCCCAG CAGGCTACCG  
 AARGGACTT

SEQ ID NO:1915: (Length of Sequence = 402 Nucleotides)

ATGGTTTATA GCAGGAATAC TTGTTCTGAA TGACTTGGAG GGAAAGTGTG TGTGTATATG TGTGTGTGTG TGTGTGTAG  
 TTTTGTGAG GTAGGGGAGA CTATTTTGTG GGTTCAGTCA CTCCAATTAT TGCCACAATG CACTTTCCCT CATAACTGCC  
 CCACCAAAGG TCTTAAAGC CATTTTTGA GCCTATTGCA CTGTGTTCTC CTACTGCAA TATTTTCATA TGGGAGGATG  
 GTTTCTCTT CATGTAAGTC CTTGGAATG ATTCTAAGGT GATGTTCTTA GCATTTTAAT TCCTGTCAA TTTTTTGGT  
 CTCCCCCTCT GCCATCTTAA ATGGTAAGCT GAAACCTGGG NCTACTGTGG CTCTAGGGGG TAAGCCCAA AGGCCAAAA  
 AA

SEQ ID NO:1916: (Length of Sequence = 382 Nucleotides)

GAAATGAGAC TTATTCTGA AATTATTAAA AAGAACAGAG ATGCTCCATT TGGCTGCATG CAGGGGGGGC GGTGGGGGG  
 ACAGAGGGGA GGACAGGGG TCAGCCAGGG GGACCGTGTG TCTTTCCAC GCAGGACACT GTGCATGGGG CTCTGGGTGC  
 ATCTGCCCAT CTGTCTATGG GCCTGTGTGT GTGTINAGAG CCAAACACAG AGAGCTCCGT GGGTCTGTGT GTATCCAAGT  
 GCTAAAAGGC AGGCTGGCTT TCTGGGGCCC ACAGCTGGCG GGCTAGTATC CTGGAAGGTT TCACTTGGTG GCTTGGCCTA

GGGACCAGCA AGGGCTTGGN GTTGAAGGG GTGGCTCAAG GAAGCCTCTT TCTCCACTCA CA

SEQ ID NO:1917: (Length of Sequence = 375 Nucleotides)

GAGATTAAAA TAAACAACAC AAAATGTATT TAAATGAGAA ATTGAAATAT TAAAAATAAT ATTAGGTGAC ATTAAAACTG  
TCATAGAAAT AAACGTGTATA TACAACAAAT AAATCAATGA TTGTTAACTT TTTTAGACAG TTTGAATATC AGATTATAAT  
GAATAGCATT ATTAGCCAGT AAAAAGAGCA TATAAATTAT TTTAAAATTC CAAATAAAAA TATTTAAAAT TTTGAAATTT  
TGGACCCAAA ATTATGTCAG TAATTTTCATG AAAGTAGATC TCCAATAGGT CCTATATTCT AGACACTATG AAATGACATC  
AGAAACCGTC AATTAAAGTG TACCCACAA GTGATAACTA GCTACCATAC AAGTT

SEQ ID NO:1918: (Length of Sequence = 315 Nucleotides)

AATATACAGT ATGATACACT GATGTGCAGA ATGTGATTAG TTTATTAATC ATATGTGAAA ATATTAGTAG CTACATATGG  
CCAGAATAGA TTTTYCTCTC TACAAATGTA AGTTAGTGT GATAGAATTT GTTATGCGAT ATTGGTTCT TGGTTTCAG  
TCTCAATGCT TCTTCTTGG CATTTTCATG ACTCTGTAAA TTAACCTCAG CATCAATTTT CTTTAAAT CAACAGTTAT  
TCAAATGAT CGGAAATTAA ACTTGTATGT AGCTAGTTAT CACTTTGGGG GTACACTTTA ATTGACGGGG TTCTG

SEQ ID NO:1919: (Length of Sequence = 285 Nucleotides)

CAGAAGTAAA AGATTTTAT TGTCTATAG ACACCTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT  
GATCAGTAAA AACATGCAAA AGTNGAAGG AAAGGGAAAA AGGTGCATTC CCTAAGCTG AGGGGGNTGG AATTTTCAGAA  
CAGAGWGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCC

SEQ ID NO:1920: (Length of Sequence = 181 Nucleotides)

GCAGGTTTAT TTTTTATTT ATGTATTNA ACTGACTTAT TTKGTATCC CACTAGAACA ATACATTCAC AATATACTTG  
CAGAACKTG CCTGGSGCAT CAGGGGAGCA GAGAACTTTT CCAGTGAATA GTTTTGAAG AAAGGAGTAA AATCTCCCC  
AAACCTFAA GGCATCCTTT T

SEQ ID NO:1921: (Length of Sequence = 351 Nucleotides)

AGACGGGGTC TCACTCTKTC GCCCAGGCTG GAGTGCAGTG GCGCAATCTC AGCTCACCGC AACCTCCGCC TCCCAGGTTA  
AAACGACTCT MATGCCTCAG GCTCCCAGC AGCTGGGACC ACAGGCACAT GCCATCATGC CCGGCCAACC TTCTGTACTT  
TTWAGTAGAG ACGGGGTTTT ACTGTGCCAC ACAGGCTGGT CCGAACTCC CGACCTCAGG CGATCAGCTR CCTCAGCCTC  
TCAAAGTGCT GGGATCACAG ACGTAAACCA CCATCGGGG CCCCAGTCTT TTCTTCAGAG GGCTCCTNAG CACCCCAAC  
CCCAAACCTG AGGCCTGTGA GAGTCTATCC G

SEQ ID NO:1922: (Length of Sequence = 198 Nucleotides)

CCTCATCTGG ACACAGATGA TTTGCCAAG AAGCGGCTG CCCAGATCTG CAAACCTTGC AACCCAGCAC TCTTGCATAT  
CTCGCTTAGC GTGTCCACAA CTGGGATGCT AGCTGGCGTA AAGATGCTCA CGCAGCCACC AGTGCCTCTG CCGTCCATAA  
GTGCAGTGTG ACTTACCCCTC TGAGAGTGGC ATCTGCTG

SEQ ID NO:1923: (Length of Sequence = 303 Nucleotides)

TTGATTTGCC TATGGTGTGA AATCCTTTGT TATTTTCTA AAAAAATAAA ATTTAAAAAG AAAGAAAAC AAGGAAGAAC  
AAGANGCTAT TTACCCAAAG TGAGCTTCA GTTTAGTTT TGCATGGCTG TTTGACTGCC TTTCCGCCCT ATGAAAATCA  
AGAAAATCTT TTTTAAAAAT GGAGTCTGCT TATTTTCCAC TCCTTGCAAG TAATACAAAT TCAGTTTGTG AGGTTGGATG

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GTCAGTIGGG AGCTGTGATG GATCTGTTGG CGGGTTTTGG ATGTGTAAAG AATGATATAT ATA

SEQ ID NO:1924: (Length of Sequence = 231 Nucleotides)

GTCTCTCCCTG ATTCTCAACC TTGCAACCT GCCTTCCTG ACTGCTAGGT CCACGTAGGC TTAACCTTGA TCTTATATGT  
AGGACCGGTC TTCACCTTAA GCAAGAGAAA TGTAAGAAGT GNTTCCCAA CTCAGTTGCT GGCCAGCTT TGGCTCGTG  
TTCCCTTCT GAGGACTGAC CTTTGGTATT GCTCTGGAGT CTCATATCCC CTTTGGCCCT AACTGACCAC G

SEQ ID NO:1925: (Length of Sequence = 249 Nucleotides)

GTCTTACTT AACCATCTTA TTGTGGGAA TTGGGTTTCC ACTTTTTTNT TATAGATAGT GGTGCACTGA ACATTTTAA  
ATAGCTTTT NCTCAGTGT AATTATTTCC NTAGAGAAAG TTACCAAGAG TGGTTTTACT AGTTCAGAGG GCCTCAGGAT  
TTTATGGCT CTNCTAGCG GTGCTCTATT ATCCINNAGA AGACTTGTAT TACTTCCAGT GTCAGAAGG TTGCNCTTCC  
ATGGAATGG

SEQ ID NO:1926: (Length of Sequence = 367 Nucleotides)

TTTTTCTCAG CAAGGAACAG TCATGAGAAA GAGAATGCGT TCCTAGGGGG AGGTCTCTAA AATGGCCACT CTGGGACTGT  
CTGTCTTATA TGGTTGTGGA TAAGGGATGA AATAAACCCC GGTCTCCCTT AGCGCTCCCA GGCCTATTAG GACGAGGAAA  
TTCCCGCCTA GTAAATTTTA GTCAGACTGG TTGTCTGTTT TCAAACCTG TCTCCTGATA AGATGTATC GATGACAATG  
CATGCTGAA ACCTCATTAG CAATTTTAAAT TTGCCCCGT GCTCTGCCAT TTGCCTTGTG ATATTTTATT GCCTTGTGAA  
GTATGTGATC TCTGTGACCA CAACCTATTG GTACANTTCC TCCCTT

SEQ ID NO:1927: (Length of Sequence = 231 Nucleotides)

CTTTTATTGG GGGCGGATAC CGCAAGGGCC CGCCACGGT CAGGTIAGTG TTCTGCTCTT GCAGAGGCGC KACAGCCTGA  
CACCTCCACC TGCCACCGC CCGGGTTAG TGAACATGC AAAGCTCAGA GGGTGGAGGC AGGGGTGGTC GCTGCTGAGA  
CCAGGGCTGN GTGCAACAGG AGGGTCAGCA CAGAGCCTGG CTGGTGTCCC TGGGCCCAA GGGGGCTGGG G

SEQ ID NO:1928: (Length of Sequence = 283 Nucleotides)

CCCCTGTCTT CCCCTGAGCC CAGGTATGTA ATTCTACAC AACTGATCG AGCTGTINTG TGTGTGTATA TGTGTGTGTG  
TGTGTGINTT AATGTGACAT GCATGTACTG ATCCNGAGAA GCCTTTATAC CAAGAATAGA GCTGGGATCT CAAGCCACC  
CTCCAAGAT CAGACAGCAG AGTGAACCAG GAGGCCAGA CAGGCCTTGT GTCARATGGC AGACNTGCA GCAGGAAGCA  
GAACACGGG ACGGGGRNCA TGGGATGCTA TKGGCAGCCA GCT

SEQ ID NO:1929: (Length of Sequence = 287 Nucleotides)

CTAGGAAGTA GGGAGAGAAT TTACTAAGTA AGGAGAGAAA GGAAAAGAA CAAACATGGA ATATGNTCAA GCAAATAACT  
TCCAACAGAA ACAAGANGAT ATGTTTAAA ATATATTTCC CTTGCCAAT AGTAAAACIT ATTTCAGGCA CAATGCATTA  
CTGAGGTGAA ATTAAAGTTA CATAAATTG AAAACATCAC ACTGGANAAC ATTTTCATGGG GCTCAACTGA AGGTGGCATA  
GTCCAGGAAG GCATTTGGAC ATGTATGGGG TGTTTCTTG TTGCCCC

SEQ ID NO:1930: (Length of Sequence = 357 Nucleotides)

ATGGAACACT ACTGCAACAG CTCCACAGAC CGCGGGTTC TGCTCATGTT CCTGGACATC TGTTCAGAGC TGAATAAGCT  
CTGCCAGCAC TTTGAGGCGG TGCACTCTGG CACCCAGTC ACCAACAACC TCCTGGAGAA ATGCAAAACC CTCGTTAGCC  
AAAGCAACGA CTTAAGCAGC CTCAGAGCAA AATACCCTCA TGATGTGGTG AACCACCTCA GCTGTACGA GGCCCGGAAC

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CACTACGGCG GCGTGGTCAG CTCATCCCC CTCATCCTAG ACTTAATGAA AGAATGGWTC GCCCACTTCG AGAAGTTGCC  
GCGCAAGGTG CTGCAGGGCA CGCGGGCTGC CTGCACT

SEQ ID NO:1931: (Length of Sequence = 343 Nucleotides)

ATCACTTCCC CACCCACAG GATCTGCCCC AGAGAAAGTC CTGCTCGTC ACCAGCAAGC TTGCGGGTGG CCAAGTTGAA  
TGATGCTGCC CGGGGCTCTG CCAGATCCTG AGACGCTTCC CCTCCCTGCC CCACCCGGGT CCTGTGCTGG NTCTGCCCC  
TTCTGCTTT TGCAGCCAGG GGTGAGGAG TGGCTCGGT GTGGGCTGGA GAGGCAGAAG CCCTTTCTCTG TTGGTGTCCC  
AGCACATGGA GCCCCTTGGG CTGAGCACCA AGACCTTGAA CCTTTTTTGT TTTACCTTTT TTCCAATAA CAGTTTGAG  
AAATATCAAT GAAATCTGGG GGT

SEQ ID NO:1932: (Length of Sequence = 314 Nucleotides)

TTTCATGGGT TTTGTFTTG TTTATTTGGA ATACTGAAAA AGTCCTTTGG GCTCTGTGGG GTTCCCCACG CTCACGGCTC  
CTTTCTCCA CACTCACTGC CCTTCTTCCC ACAGCAAATC TATTTCAAGG ACAGTACTTT TTAAATGAT TAATGTTGAG  
TTCTCACTA GCTCTGCAGA ACTAGAGGAG CTGTTTGCAT CTGCTGTGTC GGATGGAGTT TCTTTTATCT GACACCAGGT  
CTCCAACCAC ACTGATGCAA GGCATTTTAT CTACAGAGCT CAACTAGAAC CCCTTTTTCA TTAGGCTACT CCAA

SEQ ID NO:1933: (Length of Sequence = 378 Nucleotides)

AGCTTCTGC GGGACCACAG CTATGTGACT GAAGCTGACA TCATCTCTAC CGTTGAGTTC AACCACACGG GAGAGCTGCT  
GGCCACAGGT GACAAGGGCG GCGGGTCTG CATCTTCCAG CGGGAACCAG AGAGTAAAAA TGCGCCCCAC AGCCAGGGCG  
AATACGACGT GTACAGCACT TTCCAGAGCC ACGAGCCGGA GTTTGACTAT CTCAAGAGCC TGGAGATAGA GGAGAAGATC  
AACAAGATCA AGTGGCTCCC ACAGCAGAAC GCGGCCACT CACTCTGTT CCACCAACGA TAAAACTATC AAATTATGGA  
AGATTACCGA ACGAGATAAA AGGCCCGAAG GATACAACCT GAAGGATGAA GAGGGGAA

SEQ ID NO:1934: (Length of Sequence = 239 Nucleotides)

ATTTAAATTG ACAGCCTTCC ATTTTTCGAG AAAGTACAAA CAGAACTGCT TTAGCACCCA TCGAGCCCCA AACGGGTAAG  
GTAAGCCAAG GTTTTAATGA CCAGCCCAGT ATCTAAGCTT CCAAACGGAT GCCAGCCCAT CACATACTYA CCTGGGAGG  
CTGCTGCACG GGCATTCTCC YGATGCTCAC GGCATTGGK GTAGGTTTCA RGATCGCCTC TTGAGGAAG GACTTCAGG

SEQ ID NO:1935: (Length of Sequence = 319 Nucleotides)

TTAATTTTTT TTTCCCATAG AGGAATAGCA TTACAGTCTA ACAATCAGAA TTCTGTTACA CACATACACA GGCATGCCAC  
ATGACCCAGT TGAGGTGGTT GTTTCCTTGA GTCTGTTGAC ACGTCACATG GTCAAAGTCT CCTCATTTCA GCCAGTCTCA  
ACACAAAACA CCCAACAGGG ATGCACTCAA CTGTTGGT CCATGTGGAA CTAGGTGGCA GGGCGAGAGG GAAAGTAGTA  
GAAGGGGGCT ATGGTGTGTC TGCATTCACT CCCCTCATAT AAAGCCACAT GGATCTAGGG GGGGTATCCA AGAGCTCTG

SEQ ID NO:1936: (Length of Sequence = 415 Nucleotides)

CTATTTTTAC AAATTATACC TAATGAGTAA AATTAGTGTA AAGTGATAAC ATGCTTCTAC CTGTATTTCT AGTGACCCCT  
TAGCGCAGG TATTTATACC TGGTATTTAT GATGCAGTAT ATAAGTGGT AACAATAACT GACAGTATG TGCTTGCTGT  
ACATGCTGG TCTTTTGAAA CAGATTTTAG TAAGCATTTT CCAGAGGTAA AACTGTGTCC TTATTTCTAAT TTTATTTCTA  
GGGCAAAGTA GACAGGGATT ATTTCTTGA ATCTATTTCC AAATTAATAT TTTTTTCTT GGTATTTCTA CACTTTAAGG  
CCATTTGGTG CAATTTAGAA AGTGTGGCC TCCTTCCGC TAGCCACATT CAAAATTAAC TTCCAACC TCAGGAACAG  
TACAAGGAAT TTGAA



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SEQ ID NO:1937: (Length of Sequence = 393 Nucleotides)

TCACCTCTGT CACCCAGGCT AGAATGCAAT GGCACAATCT CGGCTCACTG CAACCTCCGC CTCCCAGGTT CAAGTGATTC  
 TCCTGTCTCA GCCGCCCAAG TAGCTGGGAT TACAAGCACT TACCATCACG CCCAGCTAAT TTTTGTATTT TTAGTAGAGA  
 TGGGGTTTCA CCATGTTGGC CAGGCTAGTC TCAAACCTCT GACCAGCGGT GATCCACTCA CCTCGGCCCT CCAAAGTGCT  
 GGAATTACAG GCGTGAGCAC CGCGCCAGC CTGINTTTCA TGTTAGATCA TAATATGATC TCACCAGATC CTTACTGAAA  
 ATGTACCTTA TTACAAGTAG CTAAATTTC ACATAGAGGG NTAAAAAGAT TGGGGAATCA GGTATGACT TTT

SEQ ID NO:1938: (Length of Sequence = 407 Nucleotides)

GGCTCCCTG TGGGGTGCAA TGCAGTGGCT CAGATCATAG CTCACTGCAG TCTCGAATC CTGAGCTCAG GCAGTCTACC  
 TACCTCANCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCCGGCCA GCCAGAACAT CTGTTTTTAC ACCCAGAGAG  
 CGCCCTCGT TAGGACAGAA CCACGGTGCC CAGAGCCAGG AAGCGCCCT CCTGGCGCCC AGCATCTGAG CTTCTACAG  
 TGATGGGCGG GCTCAGGAGA GGACAGGGAG TGTGGTGA AGTTCCACAG CTGGCCGCGT GGGGGGGCCC TTGCACCGCA  
 CTGCGCCT CTGACTGCC CGATCCCCG CAGCCCTGT GCGGATTGC ATTTYCTCC TNTCTYCCAG GGTACTGGCC  
 CCAGCAA

SEQ ID NO:1939: (Length of Sequence = 412 Nucleotides)

GACATGCCAC CACACAGTT AATTTTTTGT ATTTTCAGTA GAGATGGGT CTCACGATG TGTCTGGGT GGTCTTGAAC  
 TCCTGAGCTC AGGTGATCCA CACTTCGGCC TACCAAAGTG CTGGGATTAC AGGCGTGAGC ACCCGGCCG GCTAAAAGAA  
 AGGAGATTCT AATGCATGCT ACAACACCGA TGAACCTTGA GGACATGACG TTACGTGAAA TAAGCCAGGA ACAAAGACG  
 AAGCTATAT GAATCCACTC ATATGAAGTA CCTCGATTAG CCAATCCAT ACAGAAAGTA GAACAGTGGT TGCCGCGGGG  
 AGGGGGAAT GGAAAGCCTA TATTTAATGA GTCCAGAAGC TTTTTTTTGG TTTTGTTTT TAGACGGAGT CTCGCTCCTG  
 TTGCCAGGC TT

SEQ ID NO:1940: (Length of Sequence = 421 Nucleotides)

ATCCATCCCC TTGCCAGGG CCTCACATG CCGGCTCCCC CAACCGTCC TCCCCCTGG GCTGCGGTG CAGCTGTGGG  
 CCCAGGCTTT GCAGGCCCA GCTTCAAGAC AGTGGGACAC AGAAAACACT TTGCAGCATC GCTCTCCCT CCGCCACACC  
 CAGGTCAGCA GAGATGGGCG CCCACCGAG AGATCACAGC TCTGGTACAG GGAGGTGGG AGGGTTGGAG AGGAATGGAG  
 AGACATGTCA CCTCTATAGA AACCGTCCA AAGTACAAGC TAAGCAGGGG GAAGGAGGAG GGCCAGAGAG CAGCCGGAAA  
 GAAGAAAAGA GGAACACGGC AGGGGGTTCT KGGGGAGGAG GGCCTCAGC CACCCCGCAG ATGAGCGTCT TCACCAAGAA  
 GGTGTCTTC GAAGTKGCGG T

SEQ ID NO:1941: (Length of Sequence = 377 Nucleotides)

GTCAGCTCTA GAGGCACCCT GCATCATGCC CACCAGGGTG ATCCCCCTGG GATNGACCAT CTCGGGATAT GAGGCCTCGG  
 AGGCTGGGGT TGAGATTTGG TCCTGAAGAG CTTATAGCCA GATTGCCACA TTCAAGTGTA AGTCCAGGAA AGGGGCAGGC  
 GGCAGTCAC AGGGATTTAT CAGTTCCAGA ACCTCACAGT GATAAGAGGC TTTAGAGAGC ATCTAATCGA GACCTTTAAT  
 TTTTCGGGGA GAGCAGCTGA GGCGTGTGG AAAATTAGTG GAGAGCTGAC AAGTGTCTTG GCTCCTGGCC CAGGGGTCCG  
 TGGTCCANCA CGTGTCTGT CAGTTGGAAG CAAAGGGCTT GCCCGTGATT ACCTCC

SEQ ID NO:1942: (Length of Sequence = 401 Nucleotides)

TGAGAACATT AAGAAGGACA ACAAATTAA ACATTCTTTA ATAAATTCC TATAGAAAGC TCAGTCATAG GGCAATACT  
 CATTTCTCTT TCCCATATCA CGAGGATTG AGAGCTCCA ATATTCTTTG GAGAATAAGC AGTAGTTTTG CTGGATGTTG  
 CCAGGACTCA GAGAGATCAC CCATTACAC ATTCAAACCA GTAGTCCCTA TTGCACATAT TAACATTACT TGCCCTAGC

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ACCCTAAATA TATGGTACCT CAACAAATAA CTAAAGATT TCCGTGTGGC GTGAACCATT TCAATTGAA CTAATATCCT  
TGAAAAAAT CACATTATTA CAAGTTTAA TAAATACAGT AGAGAGCTGG CATTTTTCTA AATACTGGAT TTCAGATCTG  
G

SEQ ID NO:1943: (Length of Sequence = 351 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAAACCT TCTTCATTTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAG  
AGAAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTTA TTTTATCTC TTTCTCTACT  
CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCTTATGG CAACTACAAC  
AGGAGGAATC CAGCTGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGTGGGG  
TCACTCACTC TGGCCTGCGC ACTGGGGTTG T

SEQ ID NO:1944: (Length of Sequence = 406 Nucleotides)

CCCCAGCTG TCTCAGAATC TTGATGGGGT GGTCATTGAG CTCCTCTTCC GCCAGAGCAA GATCAGTGAA GTCTGGGAG  
GCAGTGGCTA CAACTGGGAC CGGCTCTGCC TGCCCTACAT TCCTCAGCTG ACAGATGAGG ATCGTTTATC CAAGAGGAGG  
AGCATTGGAG AGAACATCTT CCCTGAGGAT CCGAGGATG GTCTGGTGAA GACCAACATG GAGAAGCTGA CCTTCTATGC  
CCTCTTAGCT TCAGAAAAAC TTGATCGTAT TGGCGCCTAC CTCCTTGAGA GGCTCATCCG TGACGTGGGT CGNCATCGAT  
ATGGGTACGT GTGCATTGCT ATGGAGGCTT TGGACCAGCT GCTCATGGCC TGCCACTGCC AGAGCATCAA CCTCTTGTG  
GAGAGC

SEQ ID NO:1945: (Length of Sequence = 362 Nucleotides)

TCAATTGTG AAATTNAGAA TTCTGCTATG ACAAGTGGAA AATTGAGAAA AGACGCAGAG CCACCTTTTG TNATCGTGTA  
GGTGACAAGG AGTCTCCCAA GTATATCCTG CTAATAGGAG TAGCTCTCAA AAGTTAATCT CAATAAGCC TCCTAAAGTC  
TCTGGCAAAG AAAACTGCTG CAATCCCTTG TGCAATTCTC CAGACTAAGC TGTATGGGGG AAGCCTACCT TTTTTCAGCC  
CGAAGTTCAG GAGACTGAGG ATGTAAGTGG GGACATGATC ATTGNTTCAA AGGTGATTGC TTAAGTATCT TAAAAATGTA  
TAGAGCTAAT CTGAGTACCG CTTAAATTCA AGAGCCGTGG CT

SEQ ID NO:1946: (Length of Sequence = 408 Nucleotides)

AACCTCTNAC CCCCAGGTTT AAGCAGTCTT CCCACCTCAG CTCCTCCGGT AACTGTTCTT TGTAACCTCTC TCATCATCGA  
GGCTATATAT TAATAGACAT GGTATTAGC CCACACGAAA CATTGAGAAT TAGAATTGGA TTAAGAAGAC GCGTTTGGC  
ATCAGCTGA CTACTCTCA TCTCGTCTT CCGGAGGGT GATGCCAGCG TGGGACTCTT TGAAGGCCCT ATCAATCACA  
GGTGGCTAA AATCAAAAGG TGGGTCAGTA GGTAGGGAG GNGGCGCGA AAGGAGATGC CAGCGGTGT TAAGAAGGAT  
ATGGTCAGAA GAGCTCTTTG TCTCCATCCA CCGGCGCTCT GCTCAGCCG TGTGTCTCG GTGAGTAATT CCGGAGCAGT  
GCACGGCT

SEQ ID NO:1947: (Length of Sequence = 426 Nucleotides)

CCATTGACA CTGTTACTAT CTGCAACAGT TCTTCAGTA GAGGATGCAC TTCAAAGTGC ACTGCTTTAC TGTCTCACTG  
GAATTCTAAA AATCTAAGCT TTATCTTTT AACATTAAGC TGTGTGGGAA TGTAGCAACC TCCTGGGTGG TGGGGTGGG  
GGCATCTTCA ATTATTAGG TCTCACTGGA AAGTTTGAGA TCAGAGTTTG GTAGGTGGTG TAAGGGGACA ATGAGTAAGG  
GAGAGAAAAT ACAGGACTGA CTTGGGGCAA AAAACGCTG ATAATAATTT GTGAAGCACA TTTTCAAACCT CATTATTC  
TTACAAGGAT CCTAAGAGGC GGGTATTATG TCCNGTTAT ACCTGGAGGC TTAAATTGAA GGAACATCTN CAAGGGCACA  
CAGTTTAATG AATGGCTGAG GTAGGA

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SEQ ID NO:1948: (Length of Sequence = 349 Nucleotides)

TTACAATCTG GCTGGAAACA GATAATTAGA ACATATCACG AGAAACAGAA CAGTTAAGTG CCAAGCTCTG GTGGAGGTTT  
 TAAGTGCCAG AGGTCAGGAT ATATTTTAA GTGCTTCTGC TTCCAAACAT CACTCTTTCA AAACAAAACA CAAAGATCCC  
 CAACCAGCAT TTCTGCCCC TGAGGCACCA GCAAGGTATA TAAACGGGCT TGCAAAGTTT GATATAAGGT CTCCAGCCTG  
 GCTTTCTTTA GTCTGGGCTC AAAAGCCAGA AACCTCTGGG GGCCAGAGAA GCGCTCTTTG TTTGCCAAAC AGCATTCTCG  
 CACATCCTGT TCTACAGCAC CGTCAGTTT

SEQ ID NO:1949: (Length of Sequence = 378 Nucleotides)

TTCAATCCTG ATTTTATCCC AGCTGTGGG GATATTGATG CATTCTTAAA GGTCCCACGT CCTGATGGAA AGCCTGACAA  
 CCTTGGCCTA TTGGTATTGG ATGAACCTTC TACAAAGCAG TCAGACCCTA CCGTGCTCTC ACTCTGGTTA ACAGAGAATT  
 CTAAGCAGCA CAACATCACA CAACATATGA AAGTAAAAAG CCTAGAAGAT GCAGAAAAGA ATCCCAAAGC CATTGACACG  
 TGGATTGAGA GCATCTCTGA ATTACACCGT TCTAAGCCCC CTGCGACTGT GCACTACACC AGGGCCATGC CCGACATIGA  
 CACGCTGATG CAGGAATGGT NCCCGGAGTT TGAAGAGCTT TTGGGCAAGG TAAGCCTG

SEQ ID NO:1950: (Length of Sequence = 357 Nucleotides)

TCACTAATCT TACGAATGAA AGAAAACAAT TCCATCCCTC TCACAAAAG GACATCTTTT AAGCTTTCTT CCCAATCTAA  
 CCTCCATGGG ATCTCAGAAA TTCCAATTCT TATAACTCAA ATCCCCACAG TGGTGTAGAT GCATTAACTC CCGGGGGACA  
 GCAATCTGAG GCAGGCAGGT TCATTAAACA AACATGTTCT GTGCCCTCTG GCAGAGAGGG CAGCAGGACA TGCACTGCCC  
 CTGAGCCAAG CTGTGGCATG GGCAAGGACA TCAAGTAGCT GACAACGGTC TGTCATCTC AGCTGGGGCA GAGGGGCCAG  
 TTCAGCCTTG AAACAGCAGT TNGGGAGTGT CTCAGCT

SEQ ID NO:1951: (Length of Sequence = 336 Nucleotides)

CIATCTCCCC AAATCTACGT TTCACATTT GTACTGTTAT TTTTITAGCC CAAGCCACCT TTATGTCCTT CCTGGAACAT  
 AATAACTGCT TTCTCACTCA TCTCCTACAT TTNACCTCT TATAATACAG TCCACCTTGT ACOGAGCAAC AAGAGTTATC  
 TTTCTGAAAT GCATATTAGA TCATGTCACA TCTCTACTTG AAGCTCTCTA AAGATTTCTC ACTAAAAGCG AAGTCTAAAA  
 TTTCCACCCA GACCTATAAG GNCCTTAAAT GATCTTACCT CTCTACCTAC CTCINCGATC TTACCTATCT TCAACCTGG  
 TTCTATTTTC TATATC

SEQ ID NO:1952: (Length of Sequence = 413 Nucleotides)

CAGTATGTAA TTTAATCAGC AAATGCCCCA TTTCCATCTC TACCGGAAAG CTTTCAGACG CATTCCCAGA TCAGACAGAG  
 GACTAGGGTT AAGGCTGGGA ATGAACACC AGCTAGTATC CCACTGAGCT TTCCCAAACA CACATACACA GCAAGTCAGA  
 CTAAACAACG TCCAACGTAA GACTCACCTC AAATACTTAG ACCTAAGATT CAGTCCAGG CTCTTTTCTA TACACCAGGT  
 AAGTAAGCAC TTGGCATTCC TATCTCAGCC ATTCACTTCA CAGAATCTTT TGGGTGCCTA CTGTGTGCCC AATACTGTGC  
 TTAGTGGTAC TTGCCCTCAG CAGGAAAAAA AATTAAAAGT GTTAAATGTT ATGAAGGAAC AGATTGGNAT AGGAATCACA  
 AGGCATTGAG GTC

SEQ ID NO:1953: (Length of Sequence = 382 Nucleotides)

GTTTCACTCT TGTTGCCAG GCTAGAAATG AGTGGGATC TTGGTCACT GTAACCTCTG CCTCCCGGGT TCAAGTGATT  
 CTCTGCCTC AGCCTCCCTA GTAGCTGGGA CTATAGGTGC ATGCTGCCAC ACCCAGCTAA TTTTITTTGTA TTTTITAGTAC  
 AGACAGGGTT TOGACATATT GGCCAGGCTG GTCTTGAACCT CCTGATCTCA AGTGATCTGC CCACCTAGGT CTCCCAAAGT  
 GCTGGGATTG CTGGCCTGAG CCACCGCACC CTGCCTAGAA CATGCTTTTIN AATAGTGTCT CTAACCATCA TGTTTAGGGC

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CTTAGTGCTT ACCTCTTAAA GAAGGGCTGC TGTGAGGAT TCCNTGAGAT AGTGTGAA AA

SEQ ID NO:1954: (Length of Sequence = 389 Nucleotides)

GGAAAAGCGG GACCCAAACA GTGTGCTGG GGAAATTTGT TCCTGTTCCC TTTGGAAGGC TGAGTGGGTG ATGCAGCACA  
GGAACAAGGC TTGGACGTCA GAGGTCTCAT CTTCAGTGTG ACAAAGCATA AAGGACTTGG GGTGAGCGT GTGINTGGGC  
TCAAGTGACC ATGCAAGTNC TGTACCTCC TTCTAAGAC CCCATCCTTC TCCCAAGTCC TCCACAAGAG CTACCTTCTT  
CAAAACAATA ACAGAAACAC ATCAAGNTTN GCGTCACTGA AATTGAAGTT CTGAATTCIG CCGTCACCCC AGCAACAGTG  
CCAGTTATGA TGAGACACTT GACCCAGCAC TTGGGTTGAT GTCCTTGGCT GTTACCGTGG CACCTAGGT

SEQ ID NO:1955: (Length of Sequence = 277 Nucleotides)

GCCTCTAACT CCACGGCTCA AGTAATCCTC CTGCCTCAGC CTCCTAAGTA GCTAGGACTA CAGGTGCACA CCACCACACC  
CAGCTAATTT TTTTNCITTT TGATTTTGG TAGAGATAAG GTCCTACTAT GTTGCCAGG CTGGTCTGAA ACTCTGGCC  
TCAAGTGATC TGTCTTAGCC TTCTGAGTAG CTAGAACTAG TTTTAATGAC CNAAGAATT ATGTGTCAC CNGTGATTTT  
ATGTGTTTG TTAAGACATT CAGAATTTAG AGAAATG

SEQ ID NO:1956: (Length of Sequence = 380 Nucleotides)

GTGTAATGTT CTGAGGGTGG CGAATGCAGG GGCGGTTCC TCCCGCTGTC GATCTGGAAC ATCTTCTGCG CAACAAAGAG  
CAGGGTGAAG ATGAGGGCAA GCTGGTAGAC AGCATGGCCC AGGATGTTCT TCATCATGGT CCTGGAGATG AGCGGCTTGT  
TGCGGCCGTA CGGTTTCTC AGCAGCAGGG TCTCCGTGGG CGGCTCAGTG GCCAGTGCCA GCNAGGCAA CGTGTCATG  
ATGAGGTTCA CCCAGAGCAT CTGCACGGCC TTCAGAGGGG AGTCCTGCGT GATGCAGGCG CCTNTAAAGC CACAATCACG  
GCCACCACGT TGACGGTGAA GCTGGAACIT CAAGAATTTN GAGATGCTGT CATAGACGTT

SEQ ID NO:1957: (Length of Sequence = 328 Nucleotides)

TGTGATGTTT CTTTTTAGC CTGTTGATGT GGTAATTGT ACTGATTGAT ATTTGAATAT TAACTGGCT TTGCATCCCT  
AGAATATACC TCACCAGTTC ACTGTGTAAT AGGTGGTGC AAAAGTGCTT GCCATTTTGG ACCATGAATT TTGAATCATT  
AAAAGTAGGC TCAAACACAT CTGTATTAAAT CAAAGTAAGA ACCATTACAA TCAACACAAT TTTGCCAACA AGAAATAAGT  
TTGTTTACTC CTGTAGCATA AAAATCCGTG CTTTGAGATT CGAGGAACIT TTGGNAAGCA CTTTCTGCAT CCTGCTGTT  
GTGGAAGC

SEQ ID NO:1958: (Length of Sequence = 254 Nucleotides)

CTAGAAAGTA TCTTCTCTTT ATTTAAGTTA AACAAITTTT AAGGATGGTT TCCATCTATA AAATGGACAA AGTACAAGCT  
CTGTACAGCA GTTCTTTTAA AAAATCAACT GGAAAAAATA ATTACCAAAC TATATTTTGA ATTTGCAAAA CATACTCACA  
GATACCATCA TCTGAGCTTT TATGAGGNCA TAAGAAAGGN CCACCACAGA GAAGACAAC TAACTTCGGA CGCTTTGCTC  
GAAGGGCTCT TAGG

SEQ ID NO:1959: (Length of Sequence = 259 Nucleotides)

GTAATACGAG AAAAATCACA ACAGAGTAAT AAAGATATAA AACTTTTACA ATTAACACTC ATCAGTGTGA TAACTAAGC  
CCATGTAAAA GTAAAAATCT CTCACAGTTA ACAAACGCTT TTACTTTTAC TAAGAAGGAA CTGAAATTAA AGTCCTTAGT  
CACTTTGGAG GTGGCTGCAA AAGCTCACA CATAGTTGAT CCTTAAATA ATTATGAATG GCAACCAGTG CTGCCTTTCT  
GTACTCAACC ATGCAACTG

SEQ ID NO:1960: (Length of Sequence = 329 Nucleotides)

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GA CTACAGGT GTGCCCCACG ATGCCTGGCT AATTTTAAAG GTTTTGTAG AGATGGGGTC TTCTATCTT GCACAGACTG  
GTGTGGAATT CCTAGCTCAA GCAATTTTCC TGTCTCAGCC TCACAAAGTG CTGGTATTAC CCGTGTGAGC CACCGTGCTC  
AGCCCACTCA TGTATTTCTA ATTATTGTAT TTGTGAACTA ATCTATGAAC AACAAAAACA AACAAACAAA CAAAAAGGGT  
GGCATTCTG GGCACCAGG GAAGGTGGGA TTGGGGTGC AGCTATTTTC AAATTATATT AAAAGCAGGA TCCAGTTAG  
AGCGCTATC

SEQ ID NO:1961: (Length of Sequence = 282 Nucleotides)

ATCTCCAC CTCAGCTTCC CAAAGTGGTG AGATTACAGG NTGAGCCAT CGCACC CGC CCAATTATTC TTTCTAAACC  
ATTTCTCTT CTGTGTTTCA GCCTTTAAAA ATAAATTA AAAAAAAAAA AAAAAAATC CTTAAATTT CTCAGGTGTT  
TTCCATATCA TTTTATTATC AAGAATATGG CTAATCAGAA GTCACAGCCA GCCCCGAAC TACAACTACA AAACATGCAT  
ATTATAGGCT AACTGAGGG ATTTCTGAGG TTAGCAGATG CA

SEQ ID NO:1962: (Length of Sequence = 328 Nucleotides)

TGCTGGTGT CCGCTGTCA TCCTCAGGAG GCCAAATCAG TCCCAGCCTC TCCCACCATC TTCCCTGCAG CGATTTCTTC  
GAGCTCGAAA CATCTCTGGC GTGTCTCTGG CTGACCACTC TGGTGCTTC CATAACAAAT ATTACCAGAG TATTTACGAC  
ACTGCTGAGA ACATTAATGT GAGCTATCCC GAATGGCTGA GCCCTGAAGA GGACCTGAAC TTGTAAACAG ACATGCCC  
GGCCCTGGCA GATGTGGCCA CGGTGCTGGG ACGTGCTCTG TATGAGCTTG CAGGAGGAAC CAACTTCAGC GACACAGTTC  
AGGCTGAT

SEQ ID NO:1963: (Length of Sequence = 277 Nucleotides)

CCAAGAGACA CCCCCGCAC TCCTGTGCCC GAGCTGTCTC ATCTGTGATT CACAGTCTGC TCTTTCTGGC TGCTTGTCTG  
GAGAAGTGAT TTNAACCCC GAGGTTAGAA AGGGAGCTAT TTTTGAGCTG CTTTGTGTTA AAAGGCAAAT TTTCTGCTGG  
GGACTGGCTT TACCCCGTCT ACCTAAATCA TTTCTTACTG CCTCTGTAA CAGTCGCCTT TTGTGTTCTG CTGGNATTTG  
TTTGAACACA GTCCACAGGT TCAGTGGTTN CATCTCT

SEQ ID NO:1964: (Length of Sequence = 230 Nucleotides)

CAATGCAACC TTTTAATTCC AAGCAGAGTC CCCCTCCCC AGCATGGTCA CACACACAGT GGAAAGGGAT GTCAGGGTCT  
GGGCAGGAGC AATACCCAGA CTGGGCAAA AATATAGATA TCATTATATA CACACGTGGA CTGGAAAGAA GTCAAGCTGG  
GGGTGTAAGG TAGGGCAGGG GCAGGTGAGG AAAGCAGCTG GGGGGGCCCC AATAAATTAC ATTCTTGAGA

SEQ ID NO:1965: (Length of Sequence = 299 Nucleotides)

CGCCGTGGAT CCCGAGAAGG CACAGCAGAT GCGCTTCCAG GTGCATACCC ACCTTCAAGT GATTGAGGAG AGGGTGAATC  
AGAGCCTGGG CTGCTTGAC CAGAACCCCC ACCTGGCTCA GGAGCTGGG CCCCAAATCC AGGAACTCCT CCACTCTGAA  
CACCTGGGTC CCAGTGAATT GGAAGCCCCCT GCCCCTGGGG GCAGCAGCGA GGACAAGGGT GGGCTGCAGC CTCCAGATTC  
CAAGGATGCA GACACCCCCA TGACCTTCC AAAAGGGTCC ACAGAACAAG ATGCTNCAT

SEQ ID NO:1966: (Length of Sequence = 320 Nucleotides)

GTCCCTGCAC ATGCGTCTGG CAAGACGGGT CAGCTTTGTG GTCTGAAGCA GGAAAGTTTG TCTGTNCTTA GCCAGTAGCT  
TGGCCCTGTT GGCGCTGGTT GTGTAAGGAG AGAGACTTTG AGCTTCAGGT CTGGATAAAT NACCCCTTGA GTGTGGCTCC  
GTGGTGCCCC GAGTGGCCCC CTCAAGCTGA GTTGGGTCT TCAGTCCCC ATACTTCTTC CAGTAGATCC AACAGGAAGC  
ACAGAGGCGG CACTGCATGT TAGGTGGGCC CCAGGCATAC CACTGAGCAG ACTGTGTGGT GTGGCAACTC TCACAAGTCA

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SEQ ID NO:1967: (Length of Sequence = 296 Nucleotides)

GCTCTGCTGG CCGTGCAGAA GCTCATGGTG CACAACCTGGG AATACCTTGG CAAGCAGCTC CAGTCCGAGC AGCCCCAGAC  
 CGCTGCCGCC CGAAGCTAAG CCTGCCTCTG GCCTTCCCCT CCGCCTCAAT GCAGAACCAG TAGTGGGAGC ACTGTGTTTA  
 GAGTTAAGAG TGAACACTGT TTGATTTTAC TTGGAATTC CTCGTGTATA TAGCTTTTCC CAATGCTAAT TTCCAAACAA  
 CAACAACAAA ATAACATGTT TGCCTGTAA GTTGATATAA AGTAGGTGAT TCTGTA

SEQ ID NO:1968: (Length of Sequence = 311 Nucleotides)

ACCCCTTCA CTCCCTCCA CCAGCTCTGC AGCCAGCCTA TGGCAATTAT ATTTAAGAG GTGTCCAG GACTTTTGGG  
 ACCTACTAAA ACAATGATGG TTATTTTAGA TGIGATGATT TATATTTATG TAGAGATATT TCTGGACCAC TCAAGCTCTT  
 CGATACAAA ATCAGGAGCA TCTTGGGATT TATTAAATTA TGTAAGAAGA TAGCACAGAT ATCGGGATAT TATTGTGTGA  
 AAATGCTGCT TTTACTTTGA TGIGATCTCA TTGATGTACA CAACCAAGTT CCAATAAAGT GCTAGAATGT G

SEQ ID NO:1969: (Length of Sequence = 266 Nucleotides)

CAATAATAAA AAGGATTATA TTCCTGATAC ATGCAATATG GGTGAACCGT AAAAAATATCA TGCTGAGCAA GAGAAGCCAA  
 ACACAAGAGA ACATGTTGTT ATGATTTTAC GTACATGAAA CTTTAGTAAA GACAAGTCTA ATCCATAGTG ACAGAAAGCA  
 AATCAGTAAC TGCTGACAGG GGCAAATGAG GNGATGATCT CAAGGGNACC TTCTGGGGTA AGACGCTGTT CTGTATCTCG  
 ATCGENATTGG TGGTCACACA AGTGAA

SEQ ID NO:1970: (Length of Sequence = 317 Nucleotides)

CTCGGGAGGC TGAGGCAGAA GAATGGGTTG AGGCCAGGAG GCGGAGGTTG CAGTGAGCCA AGATTGCGCC ATTGTACTCC  
 AGCCTGGGCC ACAAGATTGA AACTTCATCT CCGGGAAAAA AAAAATGAGC TAAATACAAG AGATGGTAAT GCAGGAAATG  
 AGAGAGAAAG AAGCTATAGA ATGCACCATC AGTCTTTGCT GAGAGGAGAA GCTAGGACAC TTATGCGCAT GTNCTGTCT  
 GCCTTCCTTC CCGTCCCGCG GATGGTTGGA GCAGGTCTTT GTTTGCTGCA GAGCATGCCA TGTATCTCTC CTGTCT

SEQ ID NO:1971: (Length of Sequence = 263 Nucleotides)

GTGCATACTG CTGAGGCGGC TACGCTGGCA GGGTAAGCAA AAGAAGCACC CCAGCCTAAG TTTACAGAGA ACCAGGACAT  
 CATTTTGAAT ATAACITAGT TCTAATAGTC AAATGGCCAC TCAAGGTGAC AAATAGGAAC TTCAGTGGTC ACCCTCGGA  
 AGCAAGCTTT CAATGTCCCC CACCTGTAGA AGGCTGAAAA ACATCCTCCA AAGATAACAG GTTCCAATCA CTGGAACCTG  
 TATTACTTAT TACCAITAAA TAT

SEQ ID NO:1972: (Length of Sequence = 295 Nucleotides)

GACAAAGAAA GCAGAATAAT TTTACCTGAG AAGAAACCAG GAGGCTTCTT CTCTCTCTT TTTTCTTTT  
 TTTTGTACTA TACAGAAGAA AACTATCAGA GTTAGGTTAG AGAGTTGGGT TTGGGGTCAG GTTGTAGCAT GTGTTATATT  
 ATGGGTAAAT TTGTGTCTC CCCAAAATTA ATATGTTGAA GTCTTAACTC CCTGTACCTC AGAATGTGAC CNCATGGGGA  
 AATAAGGTCA TTGCAATATA ATTAGGTAAA ATAAGGTCAT ACTAGAAGAG GGTAG

SEQ ID NO:1973: (Length of Sequence = 243 Nucleotides)

AGACCGCAGT CATCTCAGC ACTACACGCA GGCCATNINC AAGCTGACCG CAATGCTCAT TAGCAGTAAA GATTGTINACC  
 CGCAGCTCCT TCATCATCTG TNCCTGGGTC CCCTCCGAT GTTCAATGAG CATGGCATGG AGACGGCCCT GGCCTGCTGG  
 GAGTGGCTGC TGGCTGGCAA GGATGGAGTG GAAGTGCCGT TNATGCGGA GATGGCAGGG GCCTGGCACA TGACGGTGGN  
 GCA

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SEQ ID NO:1974: (Length of Sequence = 304 Nucleotides)

GGATGAGATG ATCGACGTCA TCGGGGTGAC CAAGGGCAAA GGCTACAAAG GGGTCACCAG TCGTTGGCAC ACCAAGAAGC  
 TGCCCCGCAA GACCCACCGA GGCTGCGCA AGGTGGCCTG TATTGGGGCA TGGCATCCTG CTCGTGTAGC CTTCTCTGTG  
 GCACGCGCTG GGCAGAAAGG CTACCATCAC CGCACTGAGA TCAACAAGAA GATTTATAAG ATTGGCCAGG GCTACCTTAT  
 CAAGGACGGC AAGCTGATCA AGAACAATGC CTCCACTGAC TATGACCTAT CTGACAAGAG CATC

SEQ ID NO:1975: (Length of Sequence = 233 Nucleotides)

CCTTCTCCAT CACCCCTGGA CCTCTCTGA GGGTCTCTC AAGGCACATT TATTTTCTCT GCTGCAACCT ACCAGATCTG  
 ACATCCACCT CCCCCAGCAC CCATGGGCCA AGGAGGCCTG GGGCAGCCAA GGGGAGTTCC AGGACCAAGC AAGCAAGAAA  
 CCGTCTTTTG AACACATGGT TAAGCTTCTT CCAGCATGGC CCTAATTCCT CTACCTGCCT AAGCCAGGGG AGT

SEQ ID NO:1976: (Length of Sequence = 162 Nucleotides)

AAGTGTACA AGCCCCAGAA TGCTGCCCCG CCTGCCCTGC TGGGCGGACT GTCTGTGTGT CTGINTCTCT GCGTTCCAC  
 CTCCAAGCCT ATACCAGCTG TGTACAGGC CATCTCTCTG CCTCTGTGTG CCCCTCACTC ACCAAACAG TGTATTATA  
 GC

SEQ ID NO:1977: (Length of Sequence = 270 Nucleotides)

GGCTGAATTA AGAGCATCCA GAAAGCCCAG GCCCTCCATA GGCTGTGGCG GGATGATCTT CACTTTGATC TCTTTGGTGG  
 CATTAGGTGT TGTGTGAGT GGCTGTATT TCTTCTCTGC AGGGGGAGTG GCATCTCCTG GAGCAGCTAC GTTGCTCTGA  
 CGTTTGAGGG GGATGGGTTT AAGGTTGTAC TTGTGAGAAA CCACCACTGT GCTGGCATTC TTCTTCACAG GCACCAAGGA  
 TGGTGTCTCC AGCTCTAGTC CAGTGGAAACG

SEQ ID NO:1978: (Length of Sequence = 167 Nucleotides)

TTGCAGGAGT TGCTGATATT TATTCAAACG TCATCCATAC AATAAAGAAC TCTNCTTTTA AAATTCCATT TACATCAGCA  
 GTTAAAAAAA AGTGACAGTG GATGAAACAT GANGCTGTAA AGTGCCTTTA TGGGGAATNC AGCCACGCCT GCCTCCACTG  
 TGCTGGG

SEQ ID NO:1979: (Length of Sequence = 346 Nucleotides)

CATCATAGCA ACAAAGGGCT ATGTACTATA CTCAGAAAA CCATTATTT GCCTGGAGG CAACTGTTCT TGAGAGAGGA  
 AAAGTAAATT GTCCAAGATG TAACATCTTA TAAATAGCAA AGCAAGGATG AAAATTATTA TATTINACTA AATCAGTATG  
 AGAATCCTGA TTCTTCATTA TTATATCCCC AACACTCTAT CAGTTTGTG AACAAATCAA CAAATAAGCT TGAATAAAGG  
 NTCCACATCT CAATTCTCCT CCACCATCT ATATTGCCCT TCATCCCTAC ATTAAAAATG TTAATTTCTGC TTTTTTCTT  
 TAACAATTTA TCCCTAAAGT AACTAG

SEQ ID NO:1980: (Length of Sequence = 174 Nucleotides)

CACAACTGA CAGAGGAGAC AGGAGGAATT TAATATTACA TGCTATAATG ATATTTATCT CACAGTTTAT ATTTCAITCA  
 TTTATATTAT TTTTTTAAAA GGTTCCTTA TCAGCTACTA AACATCTCAG CAATTTGGTG TGCATAGCTC TAGATTAAGC  
 AACAAAGAAT TGTA

SEQ ID NO:1981: (Length of Sequence = 276 Nucleotides)

TGNTCACTC ATAAGTTTTC AGTGGTTAAT TACTACAGTT TAAGAAGACG TGTGATTTAT TTTTAGATCT GACCCAGCAG  
 ATCATACCTN TNCNTTGAAT TACATGGTCT TCTTTTGGCT TCTAAGATGT CACACTCCTG TCTTAGTGGC CACTGCTCCT

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CAAGCCCCCT TTGCTAGCTC TTCCTCATCT GTCCAGCCCT AACCTGACCG TGCTATGTAA GTCTTCTCCG TTTTCACCCC  
CTNCCNGGGT GACCGTTATA CTNCCAAACC TACAGG

SEQ ID NO:1982: (Length of Sequence = 288 Nucleotides)

GCTGCAGAGA GGTGTINTCC AGGAGCAGGC TTTCCCGCTC GGGATCCAGG TCATCCCCCA CCAGAGAAAT TTCACAGCCA  
TCCAGGTTGT GCACAATCTC ATCCGACATG CGTGTINTCTG TCACGTGGCC CTGCCAACTC TCATCCTTTT TGGCCTCCAC  
CTGGTGAGAA ATGGAGCAGG TGATTTGAAG ATCAGGGAAC AAAGGGAAGC CGTTGGTTCC CTCAAAGTCC ACAGCTNGGC  
GGGCAAAATG AGCAGTGCCA CTCAGCAGGA TCTGGGGGGC GTCAGGCT

SEQ ID NO:1983: (Length of Sequence = 273 Nucleotides)

CACAAGCCAC TTTCAGCCTC CAGTGGGAAG GCTCCAGCCA CACGCCGATA TTTCGTCTTG CTTCCTCGTCA TCTCATATCT  
AAAAGTCATG GCTTAAGTTA GGCAATAAAA CCTGTGGCTT TAGGCATCTT TAGTAAAAAA GCTGAACAAA TCCCAAATTT  
ATTCCCATTT TCTTGAGAAA TAAACTTCAT AAAACAACAG ACAGCTGTCA TGATTACTGA GTTTTGGCTG ATGGCGAAAT  
AATTTTATG TAAGTATACT GAATAAACAT ACA

SEQ ID NO:1984: (Length of Sequence = 221 Nucleotides)

GAAGAGGCTG CTCTGGCCTG GGACACCCCC ACTGCTCTCA AGGAGCTGGC ATCTCAGTGG CCTCTNAGCC CAGCCTGAGC  
CCTGTGGGAG TNCGGGGGCA GTGACTGGAA TGINTCTGCTG GGCAGGCTGC AGCAGCCGAG GTGGCCCCAG GGCAGAGGAG  
TGCAGCGCAN CTCATGGGTG CCTATGCCA CCCCTGGTGC TCACTGGGCT GCTGATGCG T

SEQ ID NO:1985: (Length of Sequence = 197 Nucleotides)

TTGCTACCAT GAGGGAAGTG CTCTGTGCTT GGCTACAGC AAGTATATCA GCCTGCGAGG CACAGTCCCC AAAAGTCTAG  
CTGCAATTCT ATTGGTGGTT TTCCCCAAC AGCAATAACA AGATGTTACC TGGAAGCACA CCAGAGCCAA TCATGACTCA  
GGCCTGTCTA GATGTTTAGA TGTCTGAAA TATATTT

SEQ ID NO:1986: (Length of Sequence = 268 Nucleotides)

CACTTGGACA TTCTCTTTA TTGTTCACAT TCCAACCCAG CACAGTCACA TGCACACAGG GAGATCAGAA ACCTTTNGGC  
CACAGCCCCA GGAGCCCGGC GGGGGGGAGG GCGGGACCGA CAGGGGCGGG GCGGGGCGGT GGAAGACTCC TCCTACCGAG  
CCTCCAGGC GNTCGCGT TGCATAAACA AGAGAGCTGG AGAGGNTGCC CTCAACAGTG CGCTGGGGAA AGGGGAGGGA  
ACGTGACAGG CAGGTINTGG ATAGGGAC

SEQ ID NO:1987: (Length of Sequence = 282 Nucleotides)

GTCTCACTG TAAACAAATG AGGATGGAGG AACTGAGAG GNTCAAATAT GAAAGGCAGT ATGGGGAGTT AGAGCCACTC  
GTCTACTCT GTAAAGAGCA TGACTACTCA CAGTCTTTCT AGCGGGTAGT CACTCTTTCA TTTAACAAAT ACTTAGTCCC  
TGCAATGATC TAGGATAATA ACTCAACAGT GTATATCAAG AGCCTTTAAA AAGTTATACC TGGCCGGGCG CAGTGGCTCA  
TGTATGTAAC CCTAGCACTT TGGGAGGCCA AGGCAGGCAG AT

SEQ ID NO:1988: (Length of Sequence = 226 Nucleotides)

GTGAGGGGGT TCGGTCTCTC AGGAAGTTAG GCCATAATTT CTGCAGGTTT AGTGATTAACT TTGGATCCAT CCCATGCTGT  
CTTGAAGTGT TCAGGAATGG GAAATTCTCT ATAATACCA TCCTGAGGGA TAAGTATGTT CATTTAGAT GACTTGGCGC  
TCACGNTCTC ACAGTCTAAT GCATCTTCAC TGAGGTATAT GTGGCAACCT TCTGTCTTAT TAATGG



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SEQ ID NO:1989: (Length of Sequence = 193 Nucleotides)

CTCCCTGTAG GTCATGTCCT TGAGAGTTAA AAGATGGGTT GAGTAGGCAG AGGTCTCAGG CACCGGGGAC AGAAGACAAG  
 GACATTCAGC ACGGGCAGCC ATGCTCTTCC CAGCACCCAG AAAAGGCCCA GGGCCCGGAC TCCTGGGTGT GGTTCATGAGA  
 AGCGCCTCCG ATTCAGCCTC TTCTCTTCTT GTG

SEQ ID NO:1990: (Length of Sequence = 223 Nucleotides)

CTGCTTCATT TACCACCACC AGCCGATGGA CCAGTTTATG GGATTCACCT ATGATACCAG GACTTTTCCA TTCAATTCAA  
 TTCAACAAAC TTTTAGAGAT CGCCCTATT CCAAGCTCAT CCAGGTTCTG CTTTCATGAAG GCAGGCTTTG GCATATCAGA  
 CATAAAAGC TGGAGGAACT TGAGGATTCT TTTGTGGGTA AGTATATAAA GTGCATTCCC ACT

SEQ ID NO:1991: (Length of Sequence = 385 Nucleotides)

GCAGAGAAAG TGCCAGGCAT CAACCCAGT TCGTGTTC TGCAGCTCTA CCATCCCCC TTCTTTGGCG ACGAGTCAAA  
 CAAGCCAATC CTGCTGCCCA ATGAGTCACA GTCTTTTGTG CGGTGGTGC AGCTCCTCGA CCAGATCCCA TCATACGACA  
 CCCACAAGAT CGCCGTCTTG TATGTTGGAG AAGGCCAGAG CAACAGCGAG CTCGCCATCC TGTCCAATGA GCATGGCTCC  
 TACAGGTACA CGGAGTTCCT GACGGGCCTG GGCCGGCTCA TCGAGCTGAA GGACTNCCAG CCGGACAAGG TGTACCTGGG  
 AGGCCTTGAC GTNTGNGT AGGACGGCCA GTTCAACTAC TNCINGCAG ATGACATCAT GGAAG

SEQ ID NO:1992: (Length of Sequence = 312 Nucleotides)

GGCTTACAGG ACAGAAAGGT CCCTTCTCAC AGTTTGGGAG GTCCGAAGTC TGAAGTGAAG CTGTCAGCAG GGCCACACCC  
 CCTCTGGATG CTCCAGGGGA GGGTCTTTG CCTCTTCCAG TTCTGGTGGC TCCAGGCATT CCTTGTCTTA TGGTGGCATC  
 ATTATCTCT GCTCCGTCTT CACGTGGCCT TCTCTGTGTT GTCAAATCTC CTTCTCTGTT CTCTGTAAA AACACTCGTC  
 ATTGGGATTT AGGNGCCACC CCAATCTAGA TGGTCTCATC TTGAGCCTTT ACTTTAGTTA CCTCTGCAAA GA

SEQ ID NO:1993: (Length of Sequence = 429 Nucleotides)

CTGTTTTTAC TCGACGAGGA GAAGACCTTT TCATGTGTAT GGACATACAG CTCGTGAAG CACTGTGTGG CTTCAGAAG  
 CCAATATCTA CTCTTGACAA CCGAACCATC GTCATCACCT CTCATCCAGG TCAGATTGTC AAGCATGGAG ATATCAAGTG  
 TGTACTAAAT GAAGGCATGC CAATTATCG TAGACCATAT GAAAAGGGTC GCCTAATCAT CGAATTTAAG GTAAACTTTC  
 CTGAGAAATG CTTTCTCTCT CTTGATAAAC TGTCTTINCT GGAAAACTC CTACCCGAGA GGAAGGAAGG GAAGAGACTN  
 ATGAGATGGA CCAAGTAGAA CTGGTGGGAC TTTNGATCCC AATCAGGAAA GACGGCGNCA CTNCAATGGG GGAAGCATAT  
 GAGGGATGAT GGACCATCAT CCCAGAGGT

SEQ ID NO:1994: (Length of Sequence = 377 Nucleotides)

TGGGGTIGCC AAACCAAGTG CCCGTGTCCT GTGTCAGCCA GCTGTGGCAA TTTCACCCIT ATTCTTTGGA GAGGCCAGCT  
 GCCTGTCTGA AGGAGTCAGA AGTCGGTGA TGTATTGAG GCCTTGGAGG CCCAGTNTG GCGGGAGAGA AATCCACACC  
 TGTGCCTGGA GTTCTCCTTC CCTGACCCTC TGAACCGGCG CTTAAATGC TGTCCCGCCT GGAACAGGGA GGCCACATCC  
 AGCAGTGGT CCTCAATGTG CTGCCCCAGC CTGTGGGAAT CCGTTTTTGT GCTTGATTTT TTGCTGGAGA TGTGGAAGGT  
 GATCATGCCA TCCCCATGA AGATATAAGA AACANCATAA CCATGGTCAT CAGCAGG

SEQ ID NO:1995: (Length of Sequence = 341 Nucleotides)

GGACCTATAT GGCCATGCTC TGGCTCTACC CTGGGAAGC CTGATCCCGG TGTGTGGCCC AGCTTGTTC GGCCCTGGGA  
 TGCTGCATCT CCAGGCAACT ATGCATTTC CCGGGGAGAG AACCAGTATG AGAAGTGGGG GCAGGGCACA CATTTCATCTT  
 TGTACCTGCC TCTTTGGTTT GGACCTGGCC AGTCGGGTCA CTGCCTCCAC GTCTGAGGCC CCGCCAGCTG GCGTCTGTCT

CTCGCCAGCC TCAGGCTGCT GCGCTCTCTC GGCTTTTACG GACCTCTGAG GCCGAAACCC CACCTCGAAG TTTCCCCGTG  
ACAGTGCGTC CGAGTCCACA T

SEQ ID NO:1996: (Length of Sequence = 316 Nucleotides)

GCATATGGTT GGTGAACAGT TTTGCAGCCC TAGGCTCCTG TACTGTGCGT GCACCGCCGC CCGGGCAGCC GCTGGCTCCA  
GCTCACGAAA CAGCCCCGGG CGCCGCGCCG CTC TGAGTCC AGCCTCCTAC TGAGAACAGT CCTCCCTTG TGCGGGTCGC  
ACGGCTAGCC GCAGGTTCCG CCACGTCAAA TCCATTTTNT AAAAAAGCAG GGAGCAGAGC TCTCTCTTCG CCGCCGACGC  
AGAAAGGAGC TNGGGAGGAA AAAGCTGCTG CCTTTTTCGC TGGAGATTTC TGGGCAAGGC TTCTCATTTT CCCAGG

SEQ ID NO:1997: (Length of Sequence = 320 Nucleotides)

GCAGGTTTAT GTTTTATTTT ATGTATTTTA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACTTG  
CAGAACTGTG CCTGGNGCAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGNGTAA AATCTCCCC  
AAACCCTAAA GGCATCCTTT TCGTAGTGTG TGTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA  
AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTTATTAAG GTGCACANCC ATGTCTGAGC CCCAGCTCTC TCCGCTTCT

SEQ ID NO:1998: (Length of Sequence = 395 Nucleotides)

TTTGATGCTA TGGCGCTGGA CCCAGGGCCC TCCCAGGCCA TCTCTGTTCC TCTGGGGTGG TCCAGTTCTA GAGTGGGAGA  
AAGGGAGTCA GGCGCATTGG GAATCGTGGT TCCAGTCTGG TTGCAGAATC TGCACATTGG CCAAGAAAT TTCCCTGTTT  
GGAAAGTTTG CCCAGCTTT CCGGGGCACA CCACCTTTTG TCCCAAGTGT CTGCGGTTCG ACCAATCTGC CTGCCACACA  
TTGACCAAGC CAGACCCGGT TCACCCAGCT CGAGGATCCC AGGTGAAGA GTGGCCCCCT GAGGCCCTGG AAAGACCAAT  
CACTGGACTT CTCCCTTGA GAGTCAGAGG TCANCCGTGA TTCTGCCTGC AACTTATCAT TGATCTGCAG TGATT

SEQ ID NO:1999: (Length of Sequence = 337 Nucleotides)

GAAAGTATTT GTGTGATTGA GTCACACGCT GAATCAATCT TCATATAATG CCATTTTTCG TTAAGAAT GCCAGACTTG  
GGCATTAGGC TGACATTTTC TTGAAAACAG TGAGGCTTTG CTTTAGGGAA AATAGTGGTA GTATTTATGG TCGATGATAA  
AGTTCTAGA TTPTAAGCAA AAATTTTAGA AAGCTTGTAT CAGCTGCTGT AAGTATATAA TGAAATCTGT CATTATTGA  
TTATCTGCAT AACTGAGTCA GTATTTCCAA ATGATCAATG CATAGTATTA TAAAATCAT ACATGGGTAA GAAATCTTTA  
CAAAGTGTCA GCTAGAC

SEQ ID NO:2000: (Length of Sequence = 329 Nucleotides)

ATGTAGCCCC CTGCTGCAA GGTGCCATCT TTTTCTGCT GCTCACACAG CAGCGTGCTC AGGGCCTGCC TGCATGGCAG  
NNTCATCATG GGGAGCCCA CAGCCACTGA CATCATGAAG CCCACACGGA GCATCTCGT CACCAGGTG GAGGGAAAGT  
GCATGAGCAC GTTTCGCGC CGTGGCCTCG GTGAAGCTGA CGTAGCCGAA AAACCCACC ATGACGTAGG AAGGTGGTGA  
CCACATTAAG GGAGGAAGCA AATATGGAGC TCATGGTTTT CACTTGACGG GCTCATCCAG GCTGTCGTAG GTGGGCAGCA  
CCTGGGACT

SEQ ID NO:2001: (Length of Sequence = 308 Nucleotides)

AAGTCTGGGG TTTGGTAGGC TCCCAGGATT TCCTCAGCA GGCATTTGTG CTGCCGAGG GCGTCTGGG TGCCCCGAG  
GTCNTCTGG ATGCTCTGTA GCCTGCGTG GAACGACTCC CTCACTGACT GTGTGGCAA GCTGAGCTCT GCCCTGACCC  
ATGTGGCATT GGCCAGGATG GGGGCCANGC CCGTGGGAT GCTTTGCTGC CCGTNTCTG AGGCACCGAC TGCTCTCTC  
CCCAGTGTCC CCAAGTGCTT CCTCAGAGAC TCAACCTGGN TCCAGAACTC ACCATCCACT AGGACCTT

SEQ ID NO:2002: (Length of Sequence = 242 Nucleotides)

AGCCAGGCCC TGGGCCCAAG CCCCTTGTC CTTCTCCACT GCCCTCTTT CCAGACAGTA AAGGCCATGG TCAGTGTGTT  
TTTCTCTTGT AAACAAACCC CAGCTTGTTT AACAGAAATG CTAATAACCT ACTGGGAAAG ATGGAGGTCT AAATTACCTC  
CAGGGTTTTT CTGGGGGTTT ATCACCAGTG TGGGTCCCTT CTGATACCAC CAGGTTCACT CCAGGCAGAG TGGGGCGGAA  
GG

SEQ ID NO:2003: (Length of Sequence = 328 Nucleotides)

ATATTCTCAC TTATAAGTGG GAGCTAAATN ATGGGAACAC ATGGACGCAT AGAAGGGNAC ACTTTTACAC TNCTGGTGGG  
NGTGTAAACT AATACAACCA CTGTGGAATA CAGTGTGGCG NTTGTTAAA GAACTAAAAG TAGATCTCCC GNTTGATCCA  
GCAATCCAC TACTGGGTAT CTACCCNNA GAAAATAAGT CATTATACAA AAAAGATACT TGCACACAG TTTATAGCAG  
CACAAATTTGC AATTGCAAAA AATATGGGGC CAACCCAAAT GCCCATCAAT CAATGAGTGG ATAAAGGAAA TGTGAGATAT  
ATATATAT

SEQ ID NO:2004: (Length of Sequence = 211 Nucleotides)

AGCCTTTTTA TTATGINTT TTTTTTTTT TAANCGAAGG TCCCTTACTG GTCCTGCTTC CATGAGTAGC CGTGACCAGG  
GGAAAGGGA GAGGAACCAG CCGGCACAGG GAGGGGTCTAT CTCCACAACA TTCCATTTAT ACACAGAACT AACAGACAA  
GCACAGNGTC ACTATTGGCG TTAGAAGTTG GCAGCATGGG AAGGGGGAGG A

SEQ ID NO:2005: (Length of Sequence = 241 Nucleotides)

CCGGGACACC GTGGGAAGG GGTGCAGGTG GGGTGATGGC CAGAGGAATG ATGGGCTTTT NTTCTGAGGG GTGTCCGAGA  
GGCTGGTGTA TGCATGCTC ACGGACCCCA TGTGTGATCT TTCTCCCTTT CTCTCTCTCT TTTCTCTCTC ACATCTCCCC  
CATAGCACCC TGCCCTCATG GGACCTGCCC TCCCTCAGCC GTCAGCCATC AGCCATGGCC CTCCAGTGC CTCTAGCCC  
C

SEQ ID NO:2006: (Length of Sequence = 266 Nucleotides)

TTCCCCCTAA CCTGTGAGT GGGCCTTTTA AGTAGTAAGT AGTATACACC TAGATATGGA TAGATAGCTA GGTGACCAAA  
CCTAATGGAT TAAGGCCATC CTCGCTAGG TCACTTACTA AAGATCAGGT CATATGTCAT ATCGTTCCTG TGCTTTTAG  
AACGTATTTG GGAATGGGTT CCAGATTTTT TTAAACACA TATTAAAGAT TATTTATATT ATGCTTTGTT TCGAAAGGT  
TTTAAGGTGG ATTAAATAT AAGATT

SEQ ID NO:2007: (Length of Sequence = 419 Nucleotides)

AGAAAGAGGC TTCCTTCTGC GGAGGCAGGT GGAGCACAGG GAGGGCTCCT GGGAGGCACA GGAGTGGGGT GGGGGCCAGG  
AAGGGGGAGG TGGACAGAGC GACTTGGATA AGGCTGGGCC GGGCCACGC CCACCTCAAG AGGGGGGCG CCTCCTCAGG  
AGGNATCAAG GTGCAATCCA GTCTTCCTTT CTCTCCCTGA AGACCTGAGT TCCAGCCTTC ACAGAGCGTC ATGCGCATTC  
TTCTTTCTGG ATGCTAACCC CAAATCCGAC ACTCAATGGT GCACCTCAGG TACCTGCCAA GGNTCTINTGG GCCCACATGG  
AAGGTGCAGG GTCTGGGTCC CTGGATGACG AGGTGAGGGG CAGATGGGTG ACCAGGGAAG GGCATGACCC AGAGCTNCCG  
GGACTCATGG AGGATTNGG

SEQ ID NO:2008: (Length of Sequence = 360 Nucleotides)

CTTTTCTGGA GAAATAATA CGCTCGTCC TCTAATTAGC CCATCGGTTT CAGGTTCACT ACTCTGCTAT CTTCTCCTGG  
AGTTTACACA AGCCCTCAG AGTGTAACA CCGATGTGGA TTCAATCCA CTCATTATTT TTTTCAATAA AAAGAGAACT  
GTTTCAACAG ACAGGTGTTG TTTCCGACAT CATCAGAGAG GAAGGTGGAT GGTCTATAC GGTAAGCAAT CTACCCTTCA

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GCTGCCAGGG ACAGATCCAT AAAANTCCAA AAAGGGAAGA GAGAAACAGC TTGAGTACAG CTGAATCATT CACAACAATA  
TTACAAGCAA TTACTTCAAT GGTAAAGTCT CCACTCTAGA

SEQ ID NO:2009: (Length of Sequence = 411 Nucleotides)

ATTACGGGCA CCGCCACCA CGCTGGCTA GTTTTGTAT TTTTAGTAGA GACGATGTTT CACCATGTTG ACCAGGCTGG  
TCTCGAACTC TTGACCTCAA GTGATCCACT CGCTTCGGCC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC ACCTGTGCCC  
AGCCTCACAG CTGCATCTTA ACCTTACCTT TGCTCTGCC TCTCAAGCTG GTACCTCCTA ATTTACATCC TAAGAGTGGA  
ACCATGTGAC AAGGACTGGA GTGCCATTGG CTGTGGACTG TTCAGGCAGG GAAGTACAAG ACCACTCTTG TATTCAGGGG  
CAACCAAAGG AGAGAATTAC GTACTTGTG AGTACAACT GCACCAAGCC CTGGAGACCC ATTACCACCG TTAACCCTCA  
ATACAGCTCT G

SEQ ID NO:2010: (Length of Sequence = 311 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CACGCGGTG GAGGGTNCCT NTGGAGCTGA CCGGGCCCTT  
ACCTTCTCCT GCTTGTCAGA GGTGAGTCCT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT  
GCCTCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGCCC  
TCCTCGTGGC CAGTTGACAC ATCATCCAAT TATTATCCTT CAGAGTCTAA AACTTCTCTG TGATACAAC T

SEQ ID NO:2011: (Length of Sequence = 192 Nucleotides)

TCAGGACATT TCAGTGAGGC CACCTACAAG CAGAAAGGAG GCCCAGGGCT AGGGACAGAN TGGCCCCAGA GCCAGTCAGC  
TGCAGCAATT CTGTGAGAA AGGGAGGGCA AGCTGCCAGA GCANTGNGC CCAATATGAT GCCTACACGA GACAGATGTC  
CCAGTAGAG TGTTTCAGT GACCTTCTAA AC

SEQ ID NO:2012: (Length of Sequence = 367 Nucleotides)

GGATGACCTT CGAGGACGTG TGCCGGTACT TCACGGACAT CATCAAGTGC CGGTGATCA ACACATCCCA CCTGAGCATC  
CACAAGACGT GGGAGGAGGC CCGGCTGCAT GGCGCCTGGA CGCTGCATGA GGACCCGCGA CAGAACCGCG GTGGCGGCTG  
CATCAACCAC AAGGACACCT TCTTCAGAA CCCACAGTAC ATCTTGAAG TCAAGAAGCC AGAAGATGAA GTCCTGATCT  
GCATCCAGCA GCGGCCAAG CGGTCTACGC GCCGGGAGGG CAAGGGTGAG AACCTGNC A TTGGCTTTGA CATCTACAAG  
GTGGAGGAGA ACCGCCAGTA CCGCATGCAC AGCCTTCAGC ACAAGGC

SEQ ID NO:2013: (Length of Sequence = 213 Nucleotides)

GATTTTATGG AAAAAAATTT CCATTTTNT TAAGAAATAA GGAGTTTNTG TGTCGAGGGC ATGACTACGA GAGGCTGGAA  
GCTTCCAACA GAGAATGCTG AACGANITCC CCCATGCCAT CGCCATGCAG CACGNCACCC AGCCCGATGA GACCATCTTC  
CAGGCAGAAG CTCAGTATTT GCAGATATAT GCTGTGACTC CCATTCAGA GAG

SEQ ID NO:2014: (Length of Sequence = 333 Nucleotides)

GTAAATAAA ACAGCAAATT CITAAATACA TTATGAGTAA AGAAAGATTA AAATAAGGNA ACAGTACTTA CTGTGCAACT  
TTAAATTATA CCAAGTAAAG TACACCACCT ATTCATGAT AACATTTTCC CTACGTTGAA AACACAAAAC CTACTTATCG  
ATATTTTGA TATTAAAAA AAGGACATTC ACTATTGTAG CCCTGACAAC TCTCCAGTA TTTTAAACCA TTCAGATGTA  
TTATGTGGGN ATATTTATTA ACATAATTIN GTTAAACACA TTTCTTCTA CACAACTGA ATTTTAAAG TGTCTATAAC  
ATTTTCAATT ACA

SEQ ID NO:2015: (Length of Sequence = 179 Nucleotides)

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NCACCACTTA TTGTCTTCAA ACATTATGTC ACITTTAACTT TCTTAATTTG ACAAAGCATT CAAGAAACAT CTGCAGACTA  
GTTTAAACAG ACAAATAACA CCTGTAAAGCA GACATGACTG TCCTAAATTG TTTATTAAAGA AAGTTAAAGN GCAATAATGT  
TTGAAGACAA TAAGTGGTG

SEQ ID NO:2016: (Length of Sequence = 293 Nucleotides)

TTTCCCTCC CCAGAGATGC TTTATTACAT GGTTTCATCA GTCATCAATG ATGGGTCCCT ATGCCCATGC GAGGAGACAG  
GAACATCTGT GTGGTACATG GCACTGTTCC CCTCTCAGCT ACGCAGTCAG ATGGGGGCAG GGGGATGAAT GGGTGTCTGG  
CTTCCCTGCT GTTGGGCAGG CTCTGAGATC TCAGCAGACA GAAATGAAAG CCTGGCAAAT AGGGAGGCAG GAATGTTCAA  
GCATCGGTGA CCTCCATGTT CTGCAGCCTG TTTTCTAGGG TGACGTCTCT TTG

SEQ ID NO:2017: (Length of Sequence = 504 Nucleotides)

CGCGTCTGG CCGCGCTGTG GCGCGCTGC TGTGCGNCCC CAGNCTCCTC GTCGCCCTGG ATATCTGTTT CAAAAACCCC  
TGCCACAACG GTGGTTTATG CGAGGAGATT TCCCAAGAAG TGCGAGGAGA TGTCTTCCCC TCGTACACCT GCACGTGCCT  
TAAGGGCTAC GCGGGCAACC ACTGTGAGAC GAAATGTGTC GAGCCACTGG GCATGGAGAA TGGGAACATT GCCAACTCAC  
AGATCGCCGC CTCATCTGTG CGTGTGACCT TCTTNGGNTT GCAGCATTTG GTCCCGGAGC TGGCCCGCCT GAACCGCGCA  
GGCATGGTCA ATGCTGGACA ACCAGCATCA ATGACGATAA CCCCTGGTTC CAGGTGAAAT TNCNCGGAG GGATNTGGGT  
AACANNINTT GTTACGAAGG GTGCCANCCG TTTGGCCAGT ATTGGTACCT AAAGGCTTTA AAGGTGGCCT ANAGCTTAAT  
TGGNAGGATN CGNTTNTTCC ATGT

SEQ ID NO:2018: (Length of Sequence = 354 Nucleotides)

AGANCAGACC CACAGGCATG CAGAAAGGTA GGGCAGTATG TTTAANTCCA GACTTGGCAC ATGGCTAGGG ATACTGCTCA  
CTAGCTGTGG AGGTCCCTCAG GAGTGGAGAG AATGAGTAGG AGGGCAGAAG CTTCCATTTT TTTCTTTCCT AAGACCCCTGT  
TATTTGINTT ATTTCTGCCC TTTCCGAGTC CTGCASTGGG CTGCCCTGTA CCCTGAACCT CATGAGCCTC TAAGGGAAAG  
GAGGAACAAT TAGGACGTGG CAATGAGACC TGGCAGGGCA GAGTACAAGC CCAGCACCCA GTGTCCAGN CTTACTGGGT  
CCTTANCCCTG GGCCAAACAG GGAGGGCTGA TACC

SEQ ID NO:2019: (Length of Sequence = 295 Nucleotides)

GACACAACCT TTTGAACIAT TGCTGCTGTT TTCATTTTAA AAAGGAACCT TTAATACTAA AATTATAGGA AGAACATAAT  
ATCTGACGTC ACGTAAATTC AGATTGAAG GAAATTTACT TTTTNCCTT ATTTGINTT ATTTTTCCTC ATTTTGTAA  
GAACCAGCGA ACACITTTGAA GAAAGCCAAA AGTTTACATC TGGAGCTGGA GGGTCTGTG ACTGCACACC AGGCACTCTG  
CCAGCCCTAC TTCTGCCCTGT AGTCCCTGCAG GTCACITGCC AGAGGTGGTA CTTTC

SEQ ID NO:2020: (Length of Sequence = 217 Nucleotides)

ATTGGAACCT AAGTTTCACA AGGAAAGTGG TCACITTAGT TCACCACITT CCTTGIGAAA CTTAAGTTCC AATGGGAGAA  
TGACAGTAAA CAGACAACCTA TTATAATANG TCCATGGAAG ATTTTGGTGT ATGTNAGATT TNCAAATCTG TAGAGAAACN  
TNGGCTCATI CAATAAAAAT TTTGAAACCA TTGATTAATG TCTTAATAAC TATATGT

SEQ ID NO:2021: (Length of Sequence = 380 Nucleotides)

TTTTTCTTA AAACAACAGC AACGTGATCT TGSGTGTCTG TCATGTGTTG AAGTCCATGG TTGGGTCTTG TGAAGTCTGA  
GGTTTAAACAG TTTGTGTGTC TGNGGGGATT TTCTTACAGC GAAGACTTGA GTTCTCTCAA GTCCAGAAC CCCAAGAATG  
GGCAAGAAGG ATCAGGTCAG CCACTCCCTG GAGACACAGC CTTCTGGCTG GGGACTGACT TGGCCATGTT CTCAGCTGAG

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CCACGCGGCT NGTAGTGCAG CCTTCTGTGA CCCCGCTNTG GTAAGTCCAG CCTTTCCAGG GCTGCTGAGG GCTGCCTCTT  
GACAGTGCAG TCTTATCGAG ACCCAACGCG TCAATCTGCT CATCCNTAAA GTGGGGGATA

SEQ ID NO:2022: (Length of Sequence = 223 Nucleotides)

GGTCACACAG CTAGTTGGTA GAGGAGCTCT TCCATAAGAT AGCAAGGCCA CATCACCTGC AGGGCAGTGC CTGCNCTGGG  
AGGTGGCACA ATGTGCCAAG TGATGACGAT GACAATAACT ATGAAAGGAT TTTATATTTG CACAGCAITTT GGTTCCTGA  
TCTTCGATGA GGAAGAGCTC CTGCCGATGT CTGCTGAATT GTGCAGTAAA ATATTCAGGA TGG

SEQ ID NO:2023: (Length of Sequence = 294 Nucleotides)

TATTCITAAG TTGCACTTT ACAAACCAC AAGGGAGAAG TCCTTGAAGG GGAGACAGGG GTAGGGGATT AGGGAGTGGG  
GGATGGTAAA GAGGGGAAGA GGAAGACCCA GAAACGAAGT CCCCTCCAAC CCCATCTCGG GGACCAAGCA GAGACTAGGC  
CTCAGGCTAG CCCAGCAGGG TTCTGTGTTC CTGTTGTGAC AGAGCTAGGC CAAAAGACCT CAGGGGAAGG GCCATGGCCC  
TCTAGAGACT GCCGCCATTT GAGGGACAGC CACAGGCCAA TGTTTCCTGT GCCC

SEQ ID NO:2024: (Length of Sequence = 234 Nucleotides)

ATTTTGTGCG GGTGCAAAC GTCTTCTGTC CTGAGCTGG GAGCTTCACC AGGCTTCGGT GTAGCGGACG TCCACTTCCT  
TCAAATTGGG AAGCTTGGCC TTCAGATCTT CGTAGGTGTC AGCTGAGAGC TINGTGCTGT TCATGTTTAA ACTGCAGAGA  
CTCTTCATGG AGCTCAGGGC CAGCAGGCCA GCGTCTGTAA CCGGGGTCTC GCACAGGTTT AGCACCTGGA GCAT

SEQ ID NO:2025: (Length of Sequence = 327 Nucleotides)

AGGAACAAAT GTTAAAGGGT AAGATAATTT CCTGCAAAA GGACACAGAA GGCAGTCTTA AGAAGATGAA TGGATGAGAG  
AAGGGAGAGA ATAAATGCA ATAACGAGCC AGCATTITACT ATGTATTNN TCCTCACCTG TCTCTCCATA TTTAGGTCAC  
TTACCAGTTT CTGTGCCCTT TTGGAGCTTT TMTGAGGGC TTCATTCTCA CCTGTATTT CTITAGCCCT AAATTGACAC  
TCTCTCCAAA AATCCATTC ATTGTCTGTG GACCNAGATG TTCTATGTAA TTCAGAAGCA GAATCTTGG CTAAAGGGCT  
AGTGTTG

SEQ ID NO:2026: (Length of Sequence = 328 Nucleotides)

TCAGTATAAA TTTAAAGAA ACAGCTTAAT GAAATACAAG TCAGTTTATT TGATATTCAG CCTACAGCTT TCCAAAGCAG  
CAGTTGAACA TGTGTTGAG TTTATACCAT TCATTCATTC ATTTATTTT NCTTCTTTC TTTCAGAAAA TACTGGGTGT  
TTGATATTTG TTTCACTGTG CTAGTTCTG GGAATGTGTA AGGAAGAGGC TGGCTGTGTG GATGAGAGCA ACTTGCTTTT  
TACAATAATT ATTTGTTATT GTAAATTAAC AATTTGCTCT TCTGGTATTA TATGGAAGTA TTTGATCCNG TTGATGGCAC  
TGCCTTTG

SEQ ID NO:2027: (Length of Sequence = 307 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGG AAGCTGTGTG CACGCGCTG GAGGGTNCN TTGGAGCTGA CCGGGCCCTT  
ACCTTCTCCT GCTTGTGAGA GGTGAGTCTT GGTACCCAGC ACGGTGGCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT  
GCCTCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGNCC  
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTTCTCT GTGATAC

SEQ ID NO:2028: (Length of Sequence = 272 Nucleotides)

ATCCATTTCT GCATTAACCT AGAGTTAAAA AGGAATATTG TTTATTGTTT GGCTCTCCCC ACTAGAAGTT TCACAGNGC  
ACAGATCATA TCTACCATTT GAACAGCTCT CTGCCTGATG GCTAATACAT TTNTGGCAT ATAGTAGGTA GGTGCTCAAT

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AAATTTNTTA CAGGAATAAA TGAGATAGGA TTTTCAAGGG TATTINCTAT TAGGATTTAA TAAACAAAG TGATCTTTAG  
AGAAACAAAT CTCCCCATCA ACATGCTATA CT

SEQ ID NO:2029: (Length of Sequence = 261 Nucleotides)

ATTTCTACTA AAANTACAAA AAATTAGCCA GCGTGGTGG TTGTGCACCT ATAATCCCAA CTACTCGGA GGCTGAAGCA  
GGACAATTGC TTGAACCCAG GAGGTGGAGG CTGCAGTGGG CTGAGATCGC ACCATTGCAC TCCACCTTGG GCAACAAGAG  
GGAAACTCCG TCTCAAAAAA ACAAACAAA ACAAACAAA AACAAAGTC AAGTGCTTAC ATTTTGCCAG AAGCCACAAA  
TGAAGACTGT GCCTTATAGG C

SEQ ID NO:2030: (Length of Sequence = 384 Nucleotides)

NNCCNNGGAC CAACAGCAGC CAGAGCAGTT AGCCAGTTAG TCCCCAGGCC TGTGGCACAG GCGTTTCTGA CCTGCTGGGC  
CGAGAATGGG TAAGTTGTCT GGAGTCAGGT GGGCCACGT AGGACAGGGT CACAAAGCCT GGGTTTGTIT CTGGGTACTT  
TGCGCCTCTG GGGTGCTAGA GGTGGGCGAT GGTGGCTGGA AGTAAACTG CCAACTCTGG CCCTCAGAAC TCTCAGGTAT  
AGAAGCCCAA GATGTCTAAT ACCCTNTCCC AGTGCCCGAG AGCTGCCTGG TGTGAGGTAG AGAGGACACT GTACCTGGGT  
GAATGATCAG ACCCTGGTAG CTAAGAAGGN ACTTGTCCCT TTAGTCAGTT TGCAGANCCC CTTT

SEQ ID NO:2031: (Length of Sequence = 261 Nucleotides)

ATCAGAGAG AGAAGCCACT GTTGCCAGGA CAGACGCCTG AGCGGCCAA GGAGGCTGAG TTAGCTGCCC GANTCCTCCT  
GGACCAGGGA CAGACTCACT CTGTGGAGAC ACCATACGGC TCTNICTACT TCACTGTCTA TGGCACCCCC AAACCCAAAC  
GCCAGCGAT CCTTACCTAC CACGATGTGG GACTCAACTA TAAATCTTGC TTCCAGCCAC TGTTTCAGTT CGAGGACATG  
CAGGAAATCA TTCAGAACTT T

SEQ ID NO:2032: (Length of Sequence = 344 Nucleotides)

CCCCTGCAAG GCGTCTGGTT CTTGGGGGAA AACGCTCACC CACCCCTGGT AAAGGGCCTG CAGATCGAGC ATCCCGGGCC  
CCACCTCGAC CACGCAGCAC CACAAGCCAG GTCACCCAG CAGAGGAAAA GGATGGACAC AGCCCCATGT CCAAAGGCCT  
AGTCAATGGA CTCAAGGCAG GACCAATGGC CTGTAGTTCC AAGGGCAGCT CTGGTGCCCC TGTATATGTG GNTCTGCGCT  
ACATCCCGAA TCATTGCACT GGCAAGACTG CTGACCTTGA CTCTCTCCGT CGAGTGCGTG CATCCTACTA TGTGGTCACT  
GGGAATGACC CTGCCAATGG CGAG

SEQ ID NO:2033: (Length of Sequence = 373 Nucleotides)

GGAAGAAAGA AAGAAAGAAA GAAAGAAAGA AAGAAATGG CCCCATAGTG CTAAAGTCCT CAGACATGTG TCCTGGTGCT  
GGGACAGGG CTTCTGACAT TCTCTCAGGT CAGTATTTGC AGGTATCCA CCTTCGACTT CAACACATGT GACCAGAAAC  
CTCCCAAGG CAGCCATCCA CTTTGCTGTC CCTCCGACGG CCATGGCTGA CCACTGCTGC TGCTGTGTAT CCTCGGTGAC  
ATCTGGCCTT GGCAGCCTAT GGATTTNTGC CATTCCTCTG GCATGAAATC ACTCCTTCTT GTTGTITTTAA TTTGCATTTC  
TTCAGTTACC AGCGCAGTTG AGCATCTTTT CATACACTTA CTGACCATTT CTA

SEQ ID NO:2034: (Length of Sequence = 289 Nucleotides)

CCACCAAAGA ACATCAGCT GTCTTATGTC AAATGCTCGA CAATACCTCT CAGTAGGACG TTGTTGCAAG GCTAGCTAAT  
TTTAAATCTG GTATGAGTAA TACAGTCAA CCTAGTTAGT ATGCGAGAAA GTGTTGCTA ACGCATGGTG AGAGGATGTG  
ACGTACAGC ATGAGCAGTC CCTGGTTGTC CCATTGTGAG ATAAAGTAG TNNAGTAGNT CCAAGTTTCT ATTCCAGGTC  
TCTGAACCCC AAAGCCAGGC CTTTCACTTT TGCTGGGTGG CCTGGAAGC

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SEQ ID NO:2035: (Length of Sequence = 290 Nucleotides)

CTTTTCCTTC ATCTGAACAC AGAAGGAGCC ACGGTCTGGA AAGTNTGCCT GTCCCTCCCG GGAGTGGGGA GGCCGGTGTG  
AGTTTGTATC TTCCAGCTCA GGCAGACACC TTACACAGTG CAAACAAGAG CCGTGTCAAG ATGAGAGGGA AGCGTAGACC  
GCAGACCGT GCAGCTAGGC GGCTGGCTGC TCAGGAGTCC AGCGAGGCTG AGGACATGAG CGTCCCCAGA GGACCCATTT  
GCACANTGGG CTGATGGCGC CATTTCCCCA AATNGCCATC GGCACCAGCT

SEQ ID NO:2036: (Length of Sequence = 241 Nucleotides)

TTATTTTATA TAAAAAGTGT TTCTGTGATT CTCCAGAGCC CAGGAGTCAG TNCTGGTGGT TGGAGGGACC TGCCCCCACT  
GGTTCATTTA ACCCTCTGTC TCGGTGCCCT NAGAACCTCA GCCAGAAAGG CAAGGAGGAA ATCAGAGCAN GAGCCTCATA  
CTCTGGTGA TCTATTCAIT CTNTGACCTC AGGGGTCACTA TATAAGGTCA GTGTCTCTCG TCCCCGNCAG ATCTGCACTG  
C

SEQ ID NO:2037: (Length of Sequence = 270 Nucleotides)

CTATTATTTT GCATTTTGG TAGAAGGGGT GGTCTCACC TGTGCCCCAG GCGGTCTCG AACTCCTGAG CTCAAGCGGT  
CCACCTGCCT CAGCCTCCCA AAGTGTCTCG ATTACAGGCT TGAGCCACTG CACCCTGCCC AACCTTGACT ACTTCTAATA  
GGGATGAGTC GAGTAGCAGT TNGGGGCGTC CTGTGCGGCT GGGTCTGCCT GAGGCTCCCC TGGGCCCGT CCATGGCTTG  
TTGTGCATCT GGCCTGAGT GCCTTGGCCC

SEQ ID NO:2038: (Length of Sequence = 151 Nucleotides)

ATTTTAAATT GAGCATTAG GGAATGCAGC ATTTAAATCA GAACTCTGCC AATGCTTTTN TCTAGAGGCG TGTGCCCATT  
TTTTTNTAT ATGAAATTNC TGTCCCAAGA AAGGCAGGAT TACATCTTTT TTTTTTTTTT TAGCAGTTTG G

SEQ ID NO:2039: (Length of Sequence = 166 Nucleotides)

TTTGTCTGTT ACAACCTCCG TATGAAGCCA CGCCACCCGC TGTTCACGTC CCGTGGCCT CCGTGCACAG CCACACGCTG  
CGCCCGGAAG GCCCCTGCTG TGGAGAAGCC GGACCCATCC CCGAGGTCCC CAGCGAGGAC ACANACTCCA CGAGAGCAGC  
CCCTCC

SEQ ID NO:2040: (Length of Sequence = 362 Nucleotides)

GAAGTACGGT TAAATTAGA TTTGACCATA TGGAAGATCT TTTACCAGTT GGTCTCCAAG AATGTCTTCC TTATTATGTT  
ATTGGTCATT TTTGAGCGTG TGTGTTGGTG GGGTGGTTTC TGCCCTATAT TCCTTAACCTA CATGTATAT TTTTGTAAAG  
AATTGGGAAT TCATTTTAAT GCITTTTAAC ATCTTCACTG GGAAGTGGAA TAAAGTTATT CTGACTCTG TACCTTGAGC  
CATTTGCAAA GTCAGGGGTT ACATTTTAGG TATCTAAAAA TTAATCTTTA ACTTTCACAT TCCCTGGGTT AGGAAGCTGC  
TGTTCAGGAG AAATTTTCN GGTCTTCTG GCAATTGGCT TA

SEQ ID NO:2041: (Length of Sequence = 360 Nucleotides)

CCTAATTGTA AGTATGAAG TCGAGGAGGT GCGTGATAAT GGGCCAAGTG AGGATGCAAT GCACCAGGTG TATAAGTAGC  
TGCACTCACT CCAGCTTCAA TTCCAGTTC CCAGGCAGAC CTCTCTGGAG CCTGTGAGG ATGTNAGGAC ATAGTCTGAG  
GCACATGAAT ATGATGCCA TGACCATAGT TTGGGTGCAT CCTATGTGGA TGGGGTGGG GCGTTCATG TGCCCGCNTT  
GGATGCTGCA TCATCTCTCT CCTTGAAGT TCATCTCTCT GCATCACTTC ATGAGGATGC AGTCTCTGTN CTGGAGGTGC  
TGTGGCTGGA ATATGGTGG AAATGGCTG GTGTGTAGGA

SEQ ID NO:2042: (Length of Sequence = 403 Nucleotides)



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GTTATTGTTG TTTGAGATGG AGTTTCACTT TTNTTGCCCA GGCTGGAGTG CAGTAGCATG ATCTCAGCTC ACTGCAACCT  
 CTGCCTCCCG GGCCCAAGCG ATTCTCTCC CTCAGCCTCC TGAATAGCTG GGACTACAGG TGCCCAACAG CACACCCGGC  
 CAATTGTTGT ATTTCTAGTA GAGATGGGGC TTCTTCACGT TGGCCAGGCT GGTCTCGAAC TCCTGACCCC AGGCGATTCC  
 CCCACCTCAG CCTCCAAAAG CGCTAGGACC ACAGGCGTGA ACCACTGC GC CAGTCGGAA GTAATAGTTA TTAACCAATG  
 TGATGGCCGG GTGTAGGGAC CCTCGCTGT AATCCAGCA CTTTGGGAGG CCAAGGAGGG AGGACCGCCC GNGACCAAGA  
 GTT

SEQ ID NO:2043: (Length of Sequence = 331 Nucleotides)

CCCCGTACGG TGTGGCTCTC AGCAGCCTCA CCACAGGCAC CGCAGCTTTC CCGCTGTGCA CCCAGCTGGG TGTTGGAATC  
 CCCCTGGACT GCGCCCAGGC CACCTTCATC TCCCATGACA AGATGGTCAT CTCCCTCAAG GGCACTCAGA TCTACATGCT  
 GACCCCTCATC ACCGATGGCA TCGTAGGTT COGAGTGTTC CACTTTTGAC AAGGCGGCCA CCAGCGTCCT CACCACCAGC  
 ATGGTCACCA TGGAGCCTGG GTACCTGTTC CTGAGTTCTT GCCTGGGCAA NTCTCTCTC CTCAAGTACA CCGAGAAGCT  
 TCAGGAGCCC C

SEQ ID NO:2044: (Length of Sequence = 244 Nucleotides)

ATGGAAGATA CTAAGAGCCT CAGTCTGGAA GCATTTACCT AGGAAGCGCA TATAGACAGA GAAGATCAAG GACTGAGGCC  
 TGAGACAGTC AGCACTTAAA GGGTGAGGGG AGAAGTGCCA AGGAGACAAG GTGAGAACAG CAGAAGAGTA GCCAAGGCC  
 AGGATGTTGC CACAGAAGCC AGGAGAGGTG AGCATGAAAA CAGAGGAGGA CCAGCTGCTG GGACAGAAGA GCCATATGGA  
 AGAG

SEQ ID NO:2045: (Length of Sequence = 333 Nucleotides)

GTCAGGGATT TGTCCATTCT GCTCTGGCC TCTCTGAGG CCTCATAATG GGAGACCAA TCAAAAATGT CCCATGTCAC  
 TTGAGTGGGT AACTGCTTA CAGAACCTTG AGGTTGACTC CTGCTTCAGT TCTCAGCTGT TTACCACAGC CCTCCAGGTT  
 CCAAAGATTG AGGAGCTTTC TCTTCTCTGG GAGGAACGT CTANATTTA GCTGTGTGT GTTTTGGACA GAGGCTCCAC  
 AGCGTGGCT CTGAGGAAT CCTCACCAGT TTGINCTCTT CCTCTGACA AGCAGCACCT GAGCAGATGC TGAGGCAGTT  
 CATTAAACCA GGG

SEQ ID NO:2046: (Length of Sequence = 274 Nucleotides)

GCAGGTTTAT GTTTTATTT ATGTATTINA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACCTG  
 CAGAACTGTG CCTGNGCAT CATGGGAGCA GAGAACTGT CAGTGAATA GTGTGTGAAG AAAGGAGTAA AATCTCCCC  
 AAACCCTAAA GGCATCCTTT TGTAGTGTG TGTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA  
 AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTT

SEQ ID NO:2047: (Length of Sequence = 327 Nucleotides)

GGCCGCGATG TGCTTTTNTC CTGNTTCGC TGCCCGGGAT GCGGAATCTT GAGCCTCGGT GTCGGGTTAC AGAGTTGTCC  
 TGGTGACGGG ATGCGGAGGT TTCTCTCTTT TTGTTGTTGG GCGGCTGGT GGCAGGGGCA GCTGGTGGCA GGGTTGCCCC  
 CGCTAATCTC CGAGTCTCTA AGGGCACCCT CTTTCTTGA TCCCTCTTGC GCCTCGTCCA TAAAGGCAGA CCCGCGGGCG  
 CGCGCCGGCA ACCTGAAATC AGAGCAGGCG TCGTGGCGC TCAGGAACCT TGCTGAGCTT CGCCGATCTT TCATTGTTGC  
 TTCAATT

SEQ ID NO:2048: (Length of Sequence = 241 Nucleotides)

436

ACTTTGTTGT TCTGATTTTA GGA CTCTGGC TGGCCATGTG CTNNGGTTG CCTCTCCTGC ATTINCCACT GGATTINCAC  
TGCATCGTTT GGAGATACAA AGCGAGCAGT TCTTGGTCAG AACCCCTCCTC TGCTTTTCAT TGTGTTTGAT AATGGTTACT  
GGGTCCTTCT CTCAAGGGTA GCAAGGCCAA GCTGATGGCT GCTTGTITAG GAGGCCATCA GTTCCTTCCT GTGGAGAAGG  
G

SEQ ID NO:2049: (Length of Sequence = 269 Nucleotides)

ATTTTITAGTA GAGACAGGT TTCACCATGT TGGCCAGGCT GGTCTCAAAC TCCTGGCCTC AAGTGAGCCA CCTGCTTTGG  
CCTCCCAAAG TGTGAGATT ACAGGTGAGA TATTCTATAT TCATGGATTG AAAGACTCAA TATTGTTAAG ATGTCAGTNC  
TTCTAAAGN GATTTTTTATG ATGCAACACA ATTCCAATCA AAATCCCAGG NTTTTTTTGT AGCTATCAAT TGATAGATAT  
CAACAGCCAG CTGATTCTCA AATTACGT

SEQ ID NO:2050: (Length of Sequence = 170 Nucleotides)

TTTTGAAGAG AACGTCAGTT TAATAAGCT AAATGGGGAG AATTGAAGTT TGCATTGAC ATGGTATTAA ACAAACCAA  
AGGGCTGAAA CTCATGTTTA GACAACACAG GTCCTAGTC ACTAGGCAA GAAACAGTC CACAGCAGGT GGCACAAATA  
ATTCTATAC

SEQ ID NO:2051: (Length of Sequence = 262 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCACAC GTGTCACTCG CAACATTCCT CCCACATCCA CATCCAGGAC  
GGAGCCAAAT CTCATTTGTC ACCCTCAGTC ACCACCCAC AAGATGGAGC CGCTGGTTAC GACATGGATG ACAGGTGTCA  
TGCACAGGGA GAGAATTTNT CCCCGGATAC CCTGAGGAC CAAGGACCAC CCCAGGCTA GGGTGGGAGG ATTGAGAGCA  
GTGCAAGAAA CCAAGGAGGA TN

SEQ ID NO:2052: (Length of Sequence = 325 Nucleotides)

GAAAAAAGAT TGTTTTGTTA GAAAAAGCAA AAACAAAAA GCATTAGAAA GTGGGAGCCA CTGCACAGCA GTAGCCTAGA  
GACTGGCTGC GATATGGTAG CTCTGCCTTG ATATCATCTT CGTGTCTTCA GGCATAGAGA AATGGCAGAG GAGCAGTAAG  
ACCCACAGG AGATGGCCAG AGGNTCCACC ATCAGCCTTC TGGGGACTGA GGAGGTGATC TTAGTGAAT TATTTTATAC  
TCACCTCCC CGGGGTTTAG TCCTTCCTCC AAACACTTAG TTCCAGGGCG CAGGAGACCT GTACTAGCA CTGTATGTTT  
CTTTG

SEQ ID NO:2053: (Length of Sequence = 222 Nucleotides)

TTTCAAAAT AGTCTTAAGA GTATAAGCTG TTTTINAGGG CTGTAGCCAG ACTACATAAT GAGCGGTGAA AGCGGCTGCC  
TTCCCTCTC CTGACACCAG CAAGGGGGAG GCACCATCAC CGGCCCTGCC CCATCATGCA TCCAATGATT ACTAGCACTA  
GANGCCAACG GCAAAGGNCC CCGCGCGCTT GCTCGTGTIT AATCCAGGT AAGCTATACA CG

SEQ ID NO:2054: (Length of Sequence = 341 Nucleotides)

GTAAATTAAG AATATGGCCC CAGAGTTTGT TTTATCTGGG GTCTGAGCAT AGATTTTATA TTCTCTGTG CGTTTTTTAA  
ATCTAACTTT CTGTCTCCAA TGGAGAGAGA ACAGGGAGGA TACAGAAGTA TTGCAGCCA GATCCCTAT CAGGGGGACA  
GCTGGTGGG AAAGCAGCCA CCCACAGCC TTGTGGCTAG AGTACAGTGG GGTGGACCCT CCAGCCCCAA TAGCCCTAGT  
ACCCAGCTGG CAGGGTTGCC CACCCCTGCT GTCCACCTGC TCCATCCTCT AGGGGTTCCA CAGGCCCTG ACCGCACAGG  
GAGGCTGGG CCAGCCTGGT C

SEQ ID NO:2055: (Length of Sequence = 258 Nucleotides)

437

CTGCCTCAGC CTCCCAAGTA GCTGGCATT A CAGGCGCCCA CCACCACACC TGGCTAATTT TTGTATTTTT AGTAGAGACG  
AGGTTTCACT ATGTTGGCCA GGCTGGTCTT GAATTTCTGA CCTTGTGATC CGCCTGCCTC GGCTTCCCAA AGTGTGGGG  
ATTACAGGCG TGAGCACCAC GCCCGGCCAA CTGTCTTTTC TCTAATGGCT GGCGATGTTA ATTTTTTCAC TGGCTTATTT  
ACCGTCTOCT TCTGTGGA

SEQ ID NO:2056: (Length of Sequence = 292 Nucleotides)

CTCTTGACTC CGAAGGCTGG TGACAGACAC ATAAGGCAGC TCAAACTCTT GCAACTTCCG TACAAAAGAA AAGGCTCCAT  
CCTCTTTTTT TCGAACTAAG AATAGACTAA AGTATCCAAT CAAGTCATCT GGAAGATCCA GCTTTGCAGC TACAGCCTCC  
AGGACATCCT CAGTCTGATC TGAAGTTAGC ACGTTGACCA GAACTTTCTG CCGTTTGTG AGCAGCACTT CCAAGGACAC  
TTCTCTGTG GGGACCTGCT GTGTCTCCTG TTGTGCCGA CGCAGGAAAC TG

SEQ ID NO:2057: (Length of Sequence = 293 Nucleotides)

CCAAAAAAGT TGGGTGCCTG AAGGTGGGGT TTTGATCATG GCCAGGCTTC AAATTTAGGT CAGGCTCTGG TGGTACATCC  
TTATATGCTT GGTGCTCAGC ACAGGTCAAG ACACACAATA GACCCTCAAT AAATATTTGC TGAATTTGAA CAATTCCTGT  
AAAAATCTCA TTAAGAGACA TCAGCTTGGG ACACAGTTCC TCTCTTACTG TTCCTTCTCC CAGAAGCTCC TGAATGAGC  
AGGTCTGGCG GCAGGGGGCA CACAGGGCTG CTGCTCAAAT CGGAGAATGG CAC

SEQ ID NO:2058: (Length of Sequence = 172 Nucleotides)

CTTCTACAGT CAAGGAGCTC AAGCTCGCCG GGCGACCCCTG CTCCTGCCTC CCACATTAAT GGCGGCATCC TCGGAGGATG  
ATATAGACCG GCGGCCCATC CGGAGAGTGC GCTCCAAGAG CGACANGCCG TACCTGCAG AGGCCAGGTT CTCCTTTAAC  
CTGGGGGCAG CT

SEQ ID NO:2059: (Length of Sequence = 245 Nucleotides)

GCAAGANGGC CGAGGGGGCC CAGAACCAGG GCAAGAAGGC CGAGGGTGCT CAGAACCAGG GCAAAAAGT AGAAGGGGCC  
CAGAACCAGG GCAAGANGGC TNAGGGGGCC CAGAACCAGG GCAAGANGGC CGAGGGGTCT CAGAACCAGG GCAAAAAGGC  
CGNGGGAGCC CAGAACCAGG GCCAAAAGG AGAGGGAGCC CAGANTCAGG GTAAAANGAC AGAAGGGGCT CAGGGCAAAA  
AGGCA

SEQ ID NO:2060: (Length of Sequence = 318 Nucleotides)

ATGCCCTGTT AAGGAGCTTG GGCTTGATCC TCTAGGCAGG GAGCCGTTGG AGGATTTAAG CCAGGGAGTG CTGCGGTTGG  
TCACACTGCG CATTTATGTA GATCGTTTTG GCAGCCAGGG GAAGGATGGA TTTNAGGGGG ATGAGATTAG AAAGCTGGGA  
TATGAGTTAG GAGGCTGAAA GATGGTTGAT AAAAATNATC GTTGGGCAGC CGAGATAACT GACTTCAAGG ACATATACTG  
GACTTATAGC AGAGCCTGTT GAGTCTTGCT TTGTCACACA GTTCAAATAA TCACTTAGTC ATGTGGTTTA TCTTGCCA

SEQ ID NO:2061: (Length of Sequence = 331 Nucleotides)

AAAAATAAAA ATCTATAAAC TACGGATCAT AAGCAACTCC TGTTTCTGTG GGTTTCACCA CATTCTCCAG AAAGTGAAGT  
TTTGCTCATA AAAATTACAT AGAATGTAAA CTAATTCAAT TTTTAAAGTA AATGCAAAAC TAAGGGTTAC ACAAGCACTG  
AGCATCAACA CTGACAGAAT ATTAATTCTG AAGCCCATTA ACTTTGACAA ACGTTTATTC ATCTTTGCCT TCTTGAAGCG  
TGTGACTATC CCAGTTTAC AGGAAAAGCT TAAACAGAAA AAGTTAAATA ATAATCTCAA GGTTAGNAAA CTAAGACATA  
ATTTCTAGCT C

SEQ ID NO:2062: (Length of Sequence = 316 Nucleotides)

438

CTAAATCAA CCACATAATT GGACATAAAA GAATCTTCAG CAAATACAAA AGAACCAAAA TCATAACAAA CACACTCTAG  
 GGCCACTGCA CAATAAAAAT ACAAGTCAAG ACTAAGAAGA TCACTCAAAA CAATGCAATT ACATGGAAAT TAAGCAACAT  
 ACTCTCAAAA TGACTTTTGG GTAAATAATA AAATTAAGGC AGAAATAAAG AAGCTCTTTG AAATAATGA GAAGAAAGAT  
 ACAACGTATC AGAAACTCTG GGTACAGCT AAGGCAGTGA TAAGAGGAAA ATTCTTAGCA CTAAATGCTC ACATTG

SEQ ID NO:2063: (Length of Sequence = 312 Nucleotides)

ATCCATGGCT TTAGCAAGAT CCCAGTGTG GAACTCTCCT AGCAACTTGT NITCATCCAG TGATACTGGT TCTNTGGGGG  
 GCACTTACAG GCAGAAAGTCC ATGCCCGAAG TGTGTGAGTG AGCCGTAGAT CCCAGCCTC CACTGACAGG CAGAACACCC  
 AGTCAGATAT TGGTGGCAGC GGAAAATCCA CGCCTAGCTG GCAAAGAAGT GAGGATAGCA TTGCTGACCA GATGGCTTAC  
 AGTTATAGAG GACCTCAGGA TTTCAATTCT TTTGTCTCTG AGCAGCATGA ATATACAGAG CCAACATGCC AT

SEQ ID NO:2064: (Length of Sequence = 294 Nucleotides)

TACCTAAAGA ATCTCTAGAT GGGAGACCCA GCCAGTTTGG NTCACAAATT AGCAGAAGTC AGCCAAAATA TAGAGAACT  
 GCGAGTAGAG ACCCAGAAAT TTGAGGCTG GCTGGCTGAG GTTGAAGGCC GGCTCCCAGC ACGCAGCGAG CAGGCGCGCC  
 GGCAGAGCGG ACTGTACGAC AGCCAGAACC CACCCACAGT CAACAACINC GNCCAGGACC GTGAGAGCCC AGATGGCAGT  
 TACACAGAGG AGCAGAGTCA GGAGAGTNAG ATGAAGGTGC TGGCCACGGA TTTT

SEQ ID NO:2065: (Length of Sequence = 331 Nucleotides)

GAGCTGAGTT TCACCGTGT GCCCAGGCTG GTCTCGAACT CCCGGTCTCA AGTGATCCTC CTACCTCAGC CTCCCAAAGC  
 ACTGGGATTA CAGGTGTAAA TCACTGTGCC CAACCTGCTC AAATCTTGG AGAGAAGCAA GTCTTCTAGC TGAACGTGAT  
 AATGGCCTCA AAAGCAGTGT TGACAGCAGA TAATCTTCAC ACAGACAAAT GTCTACAGTT TCTAAATAAG CCAACTGTGC  
 ATATGGCCTA CAGGCTCTTC AGCATAACCT ACCCAAAGCT CAGGTTCCCT GAAGGCCAGG ACAGTACCTC GGGCCTTCAA  
 GCAGCATTTG G

SEQ ID NO:2066: (Length of Sequence = 321 Nucleotides)

GTCTTGANCT CCTGACCTCA GGTGATCCAC CANCCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAG CAACCGCACC  
 TGGCCTTGAA CCCTTTGAAG TATTGATGCA AAAACAAGTG GTGAGCTATG GCCAAATTCG CAATTCAAAA AGATCCAAGA  
 AAGCAAGTTG AACATCTGA TTGGAGATGG GACACACCCA AACGTGTGTC TTGAGGTGGC TGCAAAGTCC TCCGCTCTGA  
 GCCAGTNTAA GCAGGTTTTA CCCAGCCCA TGATTTAGAG AGATGTTNAG TGCAGATCCT GAGCTCAGCA GAGAGCAACA  
 T

SEQ ID NO:2067: (Length of Sequence = 335 Nucleotides)

CTGGCTCTGT GGCTCAGGCT GGAATGCAGT GGGCCGAGGT TGGCTCACTG CAACCTCCAC CTCCTGATCT CAAGNCGTCC  
 TCCCACCTCA GCCTCTCAAG TAGCTGGAAC TACAGTGGAA CTACAGGTGG ACAACATCAC ACCCAGCTAA TTTTINTNAT  
 TTTTGTAGA GACGGGGTTT CACCTGTG CCGAGGCTGG TCTCAAACCTC CTGAGCTCAA GCAATCTGCC CACCTAAGCC  
 TCTCAAAGTG CTGGCATTAC AGGCATGAGC CACCGTGCCT GGCTGGGAA GCTCTTTTAA CAGAGGTGAT GTAAAGTAGA  
 AAAAGCAGTG GGCTC

SEQ ID NO:2068: (Length of Sequence = 274 Nucleotides)

GCAACCGAAT GGACAGGGTA AAGAAGGAAT GGGAAGAGGC AGAGCTTCAA GCTAAGAACC TCCCCAAGC AGAGAGGCAG  
 ACTCTGATTC AGCACTTCCA AGCCATGGTT AAAGCTTTAG AGAAGGAAGC AGCCAGTGAG AAGCAGCAGC TNGTGGAGAC

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CCACCTGGCC CGAGTGAAG CTATGCTGAA TGACCGCGT CGGATGGCTC TNGAGAACTA CCTGGCTGCC TTGCANTATG  
ACCCGCCACG GGCINATCGN ATTCTNCAGG GCTT

SEQ ID NO:2069: (Length of Sequence = 321 Nucleotides)

GTGCCATCTG TTTACTTCTC AAATGAAAA GAATTCAGGT CTGAGTGTCC AGGAAAGGGG GTGAATTTCA TAACCGCCTG  
TGACAGCGAT GGAAGGAGC CACACCCCTC CAGAGGGTAC CACCCAGCGG ACAAGTGGGG AGGAGGAAGT AGCTGGCATG  
AAGCGGCCCC ACCCAACCTC CGGGAGAGAG GAAAAGGAGA ACACGGGATG AGGAGGCTTT AAATAGTATT TCATAAAATA  
AAAAATGCCA GCACTCTTAG GAACCTCTCA TTCAACCGCC TAGTPTTTGT TTAAATAATT CTAATGCCAG AGCTGGGGGG  
C

SEQ ID NO:2070: (Length of Sequence = 161 Nucleotides)

AAAGCTGCAT AAAACAAGTT TAATTTCCAA CCAGGGTCAC AGTCATCGCG TTATCCCACA TTTTGAGCAA GGATAGAGAA  
GGTGAGTTAT TAAACATATA CAGTCTACAT TCCAGAGGAG GAACTGCAGT TACCACTATA ACACCACAGA CAACTTTGG  
G

SEQ ID NO:2071: (Length of Sequence = 288 Nucleotides)

GTGGAAGGGC CTTCATACAT GCTTCCCATC TTCAGGAACA TCAGAGAATT CATACTGGGG AGAAACCAIT CAAATGTGAT  
ACATGTGGTA AGAACTCCG TCGTAGATCA GCACTTAATA ATCATTGCAT GGTCCACACA GGAGAGAAAC CATACAAATG  
TGAGGNCITGT GGTAAGTGT TCACTTGTAG CTCAAACCTT CGTATCCATC AAAGGGTCCA CACAGGAGAG AAACCTTACA  
AGTGGAAGA ATGTGGTAAG TGCTTTATTC AGCCTTCACA ATTCAGG

SEQ ID NO:2072: (Length of Sequence = 284 Nucleotides)

TCTGTCTTC AGACCCCTTT GCGTATGT CCTCCTAAC TGGGACCTAA GCTAAGACTC AAGGGCTGCT CCCATGCCCT  
TCAGTATCCC CCATAAAATC TAACTACACA TTAGAAACTC AAAGAATAGC ATAGGCATGA TCCATCACCT GCAACAGAAG  
CAGTGAGGAG ACTTAAGCCA GGGTTCCCTNC AAGNGATTNC ACCGACCNTT CCTGCATCTC TGNATGCCGG ACTCCTAAGC  
ATTTACTCAG ATTTTAAACA GCACATAATG CCATGGCGAG GATG

SEQ ID NO:2073: (Length of Sequence = 270 Nucleotides)

GGAGCGATAC GCCCCTGTG CGAAGGACCT GCGTCTAGA GATGTGGTGT CTGGTCCAT GACTCTGGAG ATCCGAGAAG  
GAAGAGGCTG TGGCCCTGAG AAAGATCAG TCTACCTGCA GCTGCACCAC CTACCTCCAG AGCAGCTGGC CACGCGCCTG  
CCTGGCATTN NANAGACAGC CATGATCTTC GCTGGCGTGG ACGTCACGAA GGAGCCGATC CCTGTCTCTC CCACCGTGCA  
TTATAACATG GCGGCGATTC CCACCAACTA

SEQ ID NO:2074: (Length of Sequence = 278 Nucleotides)

GCACATGCCA TCAGTCCCTG CTAATTTTIG TATTTTATG AGAGACGGGG TTTCGCCATG TTGGCCAGGC TGGTCTCGAT  
CTCTGACCT CAGCTGATCT GCCACCTCG GCCTCCCAA GTGCTGCGAT TATAGACAGG AGCCACCENC CCGACCCCTC  
TCTCACTTCT CAAATCTCTT TCCTTTTTC ACCTTCTAGG TGTCAAAGAC AGTGGATGGT CTCTGAGGTT CAAACCAAG  
CTGACCGGGT AAGTATTTAC AGCAAAGCAT CCAATGGG

SEQ ID NO:2075: (Length of Sequence = 232 Nucleotides)

GTCTCTAGGA TTCACTCAA CCCAGGATCA CGGTTTTGTA ATGTTATCAA GGCATGATTT TGGATTTTCA AGCTGGCCCA  
GTGAACAACA AGCAATCAAG CATTCCTTTC TCTTCTTTC TCTCTCTCAC ATATACACAC ACACCTCTTC TCTCTCACT

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TACTTTCACT GTCACITTTCT CTCTACTGGA TAACAGGCCA AAAGTACTGG CACTCATCTT TCACTTTCTT CC

SEQ ID NO:2076: (Length of Sequence = 223 Nucleotides)

GTCACGAGGT CAGGAGATCA AGACCATCCT GGCTAACACA GTGAAACCTC ATCTCTGATC TATTCAGGGC TCINACTTCT  
TCCTGGTTTA GTCTTGGGTG GGTGTATGTG TCCAGAAATG TATGATTTTCT TCTAGATTT CTAGTTTATT TGNGTAGAGG  
TGTTTATTCT CTGATGGTAG TTTGTATTTC TATGGGATCA ACGGTGATAT GCTCTTTATC ATT

SEQ ID NO:2077: (Length of Sequence = 323 Nucleotides)

GTCCCCCTTC CCCTCTTGTG AGACCAGGCT CTGTCTCAGG AACAGGCCTG AGGGAGGAGG AGCCACGTTT CTCCTTCCTT  
GGAGCCCTGA GGTGGCCAGG CTGTCCCCAC ATAAAGCATG ACATCCAGGT GCCAGCTGGC TAAGAAATGG AGCCTGAGGC  
TGCAGCTCAC CACCTGTACC TCACAGATGT CCATTCAGAG GAAAGAAGGG TGCTCCAAAC GCCAGGCCCC CAAGGAGCAC  
AGACTCAGGG TCCAGGCAGG TTCAGTGCTA GTAGGCAGGT GGGCACTGCT GTCCAGGAAA ACCTGGTGGG CAGCTGTTTT  
CCC

SEQ ID NO:2078: (Length of Sequence = 310 Nucleotides)

AATTTGCAGT TGTTAAATCA AACCTACTGA CATTTATAGT CCCTTACTTT CTCITCTTTC TTCCATTGTA AATGCTGAA  
ATGTGCTACA GTCATACITC CCCTGTATT TTTAGGTTTT ACTCTCATAC TTCAATAATC ACTACCACCC TTTATTTCAA  
TAAAGTTTTT AAGTCAGTGC TGATTTTTTG GTAGCTCCCA TTTCTGATA TATTTGTCAT GTACATATGC AAGTGTATGT  
AATGTAGGTG TGCATCTATA TATACCCACA TATACATATA TACATATACA TATATATGTC CATATACAG

SEQ ID NO:2079: (Length of Sequence = 281 Nucleotides)

GAGACCTGCC AGAAGATTAA AAAAAAGAAT GAGAGAAAAG CCCAGTTAGT GGTGTGCAAA CTTACTTCCT TTAAATGTCC  
CATGGATGTA GGACAGTGCC ATGTTTCAAG ATGCCTGTGA GCTAGGTCTT CAAGATTTAT AGAATGTTAC TTATGAACAA  
AATATAATTA TTTATGGTAC AATTCTTGTA CTTTAGCAAA TCTGGAGTTA GTTCATAGTC AAAGTCAGTT AATATTTCTT  
AGAGGAAAGT TTTGGCTTTT TGTGGCAACA TTTTATAGC T

SEQ ID NO:2080: (Length of Sequence = 311 Nucleotides)

ATTAAAAAGA ATATTATTTA TTATCTNCTT TATTAATACT CACATGTAAAC CTTTGCTTTT TACACAAAAG TCTGCTTTAG  
AAGAATGCCT CCNCGGCTTA TCATGCCCAA TGGGGCTTTT TGTTTCTGGA CCCTTCCCC TTTCTCCACC CCCACCCCA  
CATCCAAATT ACTCTTAACA TGTTACAGA TACCACGNAT ATTTTGTAAG CAAGNTTGG GTTACTGGAA CTTGATTTCA  
TTAATATCCC ACTTCAAAT GGAAGGCAGG TGGAGGGCAG GGTAAAGNAA TAGGGGGAAA GAGGGCAAGA G

SEQ ID NO:2081: (Length of Sequence = 207 Nucleotides)

GGACGCACGC TCGCTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAAGTT TTTACTTAGC CTTTTTGGTT TGINTCCCCA  
CCCCACCTC CTCACCCCTT TTCCAGTTCT TCTTCAGGCC CCTCCAGAC GCACCCAGC GGCCCTGCA GCCCCTGCCT  
CCAGCCTCCA GCCTCACCTT TGTGCCAGA CTCGCATTG GAAGACT

SEQ ID NO:2082: (Length of Sequence = 260 Nucleotides)

TTAAAGAAA GTGCATACTT ATTGCAAGG AAAACAAATG GAATAGACAA AAATTTTAGA ATATAAAGAC TTTTINCAT  
TTATGTATGT GTTTACAATT CAAAATAATA AAGCTAGTTA AAAGTCAATA CATATTAGAT ATATTCAAAT ATTTNCCAA  
ATAAATTTG ATCTTATCAG TTAACACCCA TAGCAAAGA CTAAGGAGTA TTTGTATAAC ATTAGGGTAT TTGACCTCAT  
ATTCTATTCA TTTGGGTTTA

SEQ ID NO:2083: (Length of Sequence = 257 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT  
GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCACGACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG  
GGGTCATTTC GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA  
ACTAGCTGCT AGGCTCT

SEQ ID NO:2084: (Length of Sequence = 255 Nucleotides)

TATTATACAG CATTGTCAAG ATTATTTGAC AAAAGGCAGT AACAGCCGA AGGAAAACAC ATTTACAAGA AGCTGAACAA  
CTTGATCAG AACATACATC AAGGTGAAGA GTTTCGGCCC TCTTGGTATA GGGTATGTAT GTGTACATCT CCAATTTTGA  
ACAATGATGA CATAAGNCT AATACTCTAT TTATTCAGGN GACCCATAA TCAGGATAAT AGTAGGCATT CAGAGTAATA  
AAGTGATCAC AGTTG

SEQ ID NO:2085: (Length of Sequence = 290 Nucleotides)

GGACGCAGC TCGCTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAACIT TTTACTTAGC CTTTTTGGTT TGTGTCCCA  
CCCCACCTC CTCACCCCTC TTCCAGTTCT TCTTCAGGCC COTCCAGAC GCACCCAGC GGCCCTGCA GCCCCTGCCT  
CCAGCCTCA GCCTCACCTT TGTGCCAGA CTCGCATTG GAAGACTCCA CCTCCGCCC AGGCCTGGGC TGTGGGCGG  
TTGGAGATTG AGGTTTTAAT CCACACAAGC CCCAGTGAGG GGTGAAGCAT

SEQ ID NO:2086: (Length of Sequence = 342 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT  
GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCACGACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG  
GGGTCATTTC GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA  
ACTAGCTGCT AGGCTCTCTA TCCTGGGAGA AGAAGGTGAA GGTTCGCAA TATCAATTTT CCCAATCAG CCAAGATTTT  
CCCAGCATCT NCAGGACAAG TG

SEQ ID NO:2087: (Length of Sequence = 306 Nucleotides)

TATTATACAG CATTGTCAAG ATTATTTGAC AAAAGGCAGT AACAGCCGA AGAAAACACA TTTACAAGAA GCTGAACAAC  
TTGTATCAGA ACATACATCA AGGTGAAGAG TTTCCGCCCT CTGGGTATAG GGTATGTATG GTTACATCTC CAATTTTGAA  
CAATGATGAC ATAAGNCTA AATACTCTAT TTATTCAGGAG ACCCCATAAT CAGGATAATA GTAGGCATTG AGAGTAATAA  
AGTGATCACA GTTGAATGAA CGTGTTCACC AAAAGTCTTA GACCAACCTG ATATCATCTT ACACCTT

SEQ ID NO:2088: (Length of Sequence = 326 Nucleotides)

ATGAATAAC TTAGGCAATC TTCCACTTTG ACTGAAATGA TTAAGATCAG TTTACCGAAA GTCATTTCAT CCTTGCCTTG  
CAGGCATCTG GCTATTCTTG GTGCAGGGCT GATGGGAGCA GGCATCGCCC AAGTCTCCGT GGATAAGGGG CTAAAGACTA  
TACTTAAAGA TGCCACCTC ACTGCGCTAG ACCGAGGACA GCAACAAGTG TTCAAAGGGT AAGCCTGCTC TCTCTCTTG  
CAAGAGTTAG AATGTCCTTT GTTCTTGGT TAGTGTGTTT TTGTGGTGGC TTGGTGGGTT TTTTGTGTTG TTGTGCTCTG  
CCATCA

SEQ ID NO:2089: (Length of Sequence = 291 Nucleotides)

GGGTTTCCCT TTCCACTCAT CGGAGATTCA GAGGGATGAG CTGGCACCAG CTGGGACAGG GGTGTCCCGT GAGGCTGTAT  
CGGGTCTGCT GATCATGGGA GCGGGCGGAG GCTCCCTCAT CGTCTCTCC ATGCTGCTCC TGCGCAGGAA GAAGCCCTAC

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GGGGCTATCA GCCATGGCGT GGTGGAGGTG GACCCCATGC TGACCCTGGA GGAGCAGCAG CTCGCGAAC TNCAGCGGCA  
CGGCTATGAG AACCCCACTT ACCGCTTCTT GGAGGAACGA CCTGACCCG G

SEQ ID NO:2090: (Length of Sequence = 293 Nucleotides)

TTATGTGGAA TACCACACGC CTGGTACAT GGCTGAACTC TTCCCTTCA TCCTGCTTGG GGTCTTCGGG GGCTTGTGGG  
GAACCTCTT CATCCGCTGC AACATCGCCT GGTGCAGGAG GCGCAAGACC ACCAGGCTGG GGAAGTACCC GGTGCTGGAG  
GTCAITGTGG TGA CTGCCAT CACTGCCATC ATTGCCTACC CCAATCCCTA CACAGCCAG AGCACCAGCG AGCTCATTTT  
TGAGCTGTTT AATGACTGTG GAGCCCTTGA GTCTTCCAG CTCTGTGACT ACA

SEQ ID NO:2091: (Length of Sequence = 274 Nucleotides)

CTTTTGAAT GGTCAAACAA TTAAAGTCAA ATGTTTTAAT GGTGCAATTA AAATAAGGGT TCAAACATGT TTTCAATATA  
TTAATTNCTT TAAAGTCATG TTCAGGCAAG GTGCTGTTTA AAAAACCCT ATTAGCTTTG TCACACATG TAAGTTATCA  
AAAGTTACCA AGGTAATTTT GACGTTGAAT GCAGCTTTAA ACAATAAAAA AATGGTATTA GGTTTACTTC TCGAAGCAAA  
GAGAGCCCC AACCTTGTA ACTAAACATT CTGA

SEQ ID NO:2092: (Length of Sequence = 290 Nucleotides)

GGTACGTAGG ACGCTGGCCC TGTCCTCCGG CCGNTCTGG TCAGACACAA TCATGGTCTC CACCACGAGG TGTGCAATGC  
CTGGNAGGGT GGTITGCTCC AGGTCCAGGA GGCAGATCC ATGGGCGATG GTCCTCTGA GCTCCAGAAG GCTACGGAAG  
GAGAGCGAGG CAACATGGGG CTTCCCCCAG CGCTCCGTCT CCTCTCCAC GTCCTCTCA AACTTGATCC AGCGGGCCGT  
CTCCCGCCAG TGGGGCTCTT GGCTGCGGTC CAGCATCAGC TCGTTCAGCT

SEQ ID NO:2093: (Length of Sequence = 323 Nucleotides)

AGCTACACTG ATACAAGTGG ACCTAAAGAA ACGAGTTCGG CTACTCCGGG ACGAGACTCC AAAACCATCC AAAAGGGATC  
AGAAAGTGGG CGTGGGAGGC AGAAATCTCC TGACACAGAT GACAGCACAA CACAGAGAAG AACTGTAGGC AAAAAACAAC  
CCAAAAAGGC TGAGAAGGCA GCTGCTGAAG AGCCTCGTGG AGGCTGAAG ATAGAAAGTG AAACCCCTGT AGACTTGGCT  
AGCAGCATGC CCTCCAGCAG ACACAAAGCA GCCACCAAAG GCTCAAGGAA ACCCAATATA AAGAAGGAGT CTAAGTCTTC  
CCC

SEQ ID NO:2094: (Length of Sequence = 255 Nucleotides)

AAGGATGTTT TGGTCCCTG CCTCAAGGCC GGCCATGTGG GAGTGTATC TGTGGAGTTC ATTGCCCCAG CCTTGGAGGG  
AACGTATACT TCCATTGGC GTCTTTCTCA CAAAGGCCAG CAATTGGGC CTCGGGTCTG GTGCAGTATC ATAGTAGATC  
CTTTCCCTC CGAAGAGAGC CCGATAACA TTGAAAAGGG CATGATCAGC TCAAGCAAAA CTGATGATCT CACCTGCCAG  
CAAGAGGAAA CTTTT

SEQ ID NO:2095: (Length of Sequence = 305 Nucleotides)

GCACTCCAGC CTGGGCAACA AGAGCGAAAC TCCATCTCAA AAAACAAAG AAAGAACTN CTGAAGTCGG GGGCTGCTAG  
AGGATTTTCA GGAAGGGTCA ACACAGGCCT CACTTCCAGT CCTCATTTT CCAGCTCACA GAGTCACCAG AGGGTGAGAA  
GCAGAACGTG CCAGCAAAGA GGGAAAAGGC CACAGAACCA CTTINTCTC AATTACAAAG GGTGCATTT CAGAGGAGGG  
AATAGGGATG GAGAGGAGGA GAAGACCTGC CCAGGAGCCA GATAAATTCA AAGTCACCAA GATGG

SEQ ID NO:2096: (Length of Sequence = 327 Nucleotides)



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CTAGATATAA CTACCCCTCT CTATTCCTCA CCTAAATCCT TATACTGCTG ATGACTTTGG AAAATAGTAC AGGGTTTTTAC  
 AGTCTAATCA TGACAATACA TCTCCAGGNT CCTTGAGCCA AATACATTCC TCAGAATACT TTTTITAAAA AACTGAAAIT  
 GATTACTTGT ACTTTGTCAT CACCAAAAAT ATCTGTAGCA AGACATACTG TTCTCAGCAT CCACTTCTAC CATCCTCACT  
 ATTGTAACTC ACAGTAGACT ATGCCTCCTA CTTTACTGAA AAGATACAAA CCAATTACCTA GCAATCATTC TTCCACCTTA  
 AACATAT

SEQ ID NO:2097: (Length of Sequence = 296 Nucleotides)

CACCCTGCTG AGGTCAATTT CGTCACTGAT GCCTCGGGTC ACATAGGCCC TGATGACCCA GATTTACACAC AGAGGTCAGT  
 ACATCGGTCA ACTTTCTCTC CAGGAGGGGC CGGGGCTGGT GGGCCATGCC CACTCCGTGC CACATGCCTA GCATTTCAGAG  
 CTTTGTAAAG AAGCCCTGTT CTAAATGCTC AGGTCCCACC CTTCTTGTG AAGAGAAGCC ATGGGCTTCC TGCTCCTGTG  
 TCACAGTGTG CCACITGAAG GGTGGCTCTT CCCCATTCCT CTTCCATGGG GGCCAG

SEQ ID NO:2098: (Length of Sequence = 324 Nucleotides)

ATTGGTTTTN TTGAGTGTIT TCTCTTTTT NITTTGTTTT AACATACTTA CTGGGTATAA AGTCATGCAA AGAAAACAGT  
 GCAGACAGTA GATCCTAGTG GATGTGCCAA GGTATTCCAC TCAGAGTCAA TCCCAGGGAA AGAGGGAAAG AGGAAAAGAA  
 AGAGAGAATG CGAACCCGAG GCTGCAGGAT GAGGCATGAA GAGTAGAAAT TCCCAGTGCT TTGCTGTGGT CATCAGACGC  
 CAAGGGGAGA GAGGCAATNA AGACACACGC TCACGGGCCC CCCAGAGGTG GGTGGGGGGT GCTGGGGGGC GGCACACAGA  
 TATG

SEQ ID NO:2099: (Length of Sequence = 299 Nucleotides)

GAAACCGTCA GTAAGGAGCT CTTTATCTTT ACCTTCCCAC TCCAAACCTA CTGCTAGCT GTTCTTATCA TTGCCTCCTT  
 TTTCTCTGTC ACAAAAATGT GTTCCATCTT AATGAACACA TTTCATTAAT GTCTTCTTA ATGAAGGACA GTCCCTTTCC  
 CTGTGCTGTG AATCCCATAG TAATGACATT AGCTTAAGTT TTCTGAGCAC TTGCTATCTG CCAGTTCCTC CCATGAATTA  
 TCTTGCTTAA GCTTTGCAGT ATACCTGTGA AATAGGTGGC AGTAGTTGTC CCACCATAC

SEQ ID NO:2100: (Length of Sequence = 308 Nucleotides)

GGCAGCTTAT TTTGGATTGG TTCACAATGT GGATCAAACA GGAAAATCTG TTATCATCAA CAAGACCAGC AGCACCAGAA  
 TTNCCGAGT CTTCCAGCAG TGCAGGCTCC TCAGGNTGCG TGTCCTCCAC CCATCCACCT CTCCAGAGCA CACCCCTAGT  
 CTCAGGTGTG GCAGCTGGCT CTCCAGGCTG TGTGCTTAT CCAGAGAATG GAATAGGGGG CCAGGTGTCT CCCAGCAGCA  
 CCAGCTACAT CTTCTTCCA CTTGAAGCTG CAACAGGCAT CCGCCTGGG AAGCAATCCT TCTTTAAT

SEQ ID NO:2101: (Length of Sequence = 291 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGINTTGGT AGATAAATGT  
 CATAGACTGA TCCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC  
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTGG TGATATGGCT  
 TTGGNGCCCA CGCATAGGAC TTCCACAGAA CTTTTTCAAA GGCAATCACC C

SEQ ID NO:2102: (Length of Sequence = 323 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGINTTGGT AGATAAATGT  
 CATAGACTGA TCCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC  
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTGGT GATATGGCTT

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TGGTGCCAC GCATAGACTT CCACAGAACT CTTCAAAGCA ATCACCAGAA ATTTGATTCT TTCATATTTT ACAACTTTAT  
AAT

SEQ ID NO:2103: (Length of Sequence = 270 Nucleotides)

CCTTTCACCTC CCCCGCCCTG GGCCTCTGCT CTCTTGCCCTG GNTTCCTTCT TTTTGTAGGG AAAGAGGGTG GGGCTGCAGG  
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA  
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT NTGACTNGGC  
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG

SEQ ID NO:2104: (Length of Sequence = 367 Nucleotides)

CCTTTCACCTC CCCCGCCCTG GGCCTCTGCT CTCTTGCCCTG GNTTCCTTCT TTTTGTAGGG AAAGAGGGTG GGGCTGCAGG  
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA  
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT GTGACTGGGC  
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG TAAGGTCACC TTCCTTCTC TGGATGCTGG TTTCAACCAT CTATATATGG  
CATCCACGCA TGGGATCTGC AAGCTGGAGC CCTCCTACCC GCAGCTT

SEQ ID NO:2105: (Length of Sequence = 288 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT  
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCNTGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT  
TGCCTCANAT CAGCCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTCTCCC TTGTACTTTT TTTTGACCTG  
GNATCTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTG

SEQ ID NO:2106: (Length of Sequence = 349 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT  
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCNTGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT  
TGCCTCAGAT CAGCCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTCTCCC TTGTACTTTT TTTTGACCTG  
GCATCTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTGCA AGGAAAGCTG CCGTCTCTTT TGGCAGTCTT  
GATGCAGAGC CTGCACTCTG GCACTCGCT

SEQ ID NO:2107: (Length of Sequence = 329 Nucleotides)

GTGACAAGCT CCAGAAGCCC GNTTCGCAAC ANCCAGGAGG GCCAGGCCAC TCCAGGCAGG AGGCAGTGGG CTGGCAGCCA  
CCCTGGGCAC AGAAGAGCAG ACGCAGACAG TGCTGGGCAA CGAGGGGCTT TTTTCATGGG CCCGCTGCC CTGTCCCTCC  
CCCCAGGTCC CCACCTTCTA GGGTTAAAGT GCAGCTGGGA GGGAGGAGGC AGGCAGAAAT NGGGAGCTAG AGAGAGCCCA  
AGTGAACCCT GACTGTCCAC GCAAGTCCCA TGTCTCTCTC GTCTGGAGT TCCTCGAGGT TCAGCGAGCC CATCCGCTT  
AGGGCTCT

SEQ ID NO:2108: (Length of Sequence = 261 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCCTGG TTAGAAGACC  
TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGATG GCTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA  
CCTCTAACTC TCTCTGCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTACATGC CCCTGTGTTA  
GCTGTGAGGG ACAAGGCAGA G

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SEQ ID NO:2109: (Length of Sequence = 329 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCCTGG TTAGAAGACC  
TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTTAG GCTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA  
CCTCTAATC TCTCTGCCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTTCATGTC CCTGTGTGTA  
GCTGTGAGGG ACAAGGCAGA GAAATAACTG CCCAAGTTCA GCTTCCATA ATGTTTGGGG GATGCTATGA CTCAACTTTG  
ATCTATTTT

SEQ ID NO:2110: (Length of Sequence = 271 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCAGTTG CCCAGGGCCA CCTTGCCCTG  
AGGTCCCTGT GTGGCCGCCC TGGCTTGGCA GCCCTGCCCA CGCTGCCCC GCAAACAATG GTGTGTGCGT TTTTACAGCC  
CTTTTTAGGA ACCCAATATG GGCATAAATG TAACACCTGT AGCGGGGGCA GATTCTCTGT ATGTCAGTT AACAAATTAT  
TGTAAATGTA TTTTTTTAGA AATCTTAAAA T

SEQ ID NO:2111: (Length of Sequence = 315 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCAGTTC NCCCAGGGCC ACCCTGCCCT  
GAGGTCCCTG TGTGGCCGCC CTGGCTTGGC AGCCCTGCCC ACCTGCCCC CGCAAACAAT GGTGTGTGCG TTTTACAGC  
CCTTTTTAGG AACCAATAT GGCATAAAT GTAACACCTG TAGCGGGGGC AGATTCTCTG TATGTCAGT TAACAAATTA  
TTTGTAAATG ATTTTTTTAG AAATCTTAAA ATTGCCTTTG CACTGAAGTA TTTTCATAGC TGTTTATATC TCTTT

SEQ ID NO:2112: (Length of Sequence = 275 Nucleotides)

GCAAGANAGA CCAAACCTA ACCTGAGTTA CAAGAAACAA GACAGTAATG GCTATAAAGG GAGTGACCAG GAGCAACTGG  
GACACTCCTT TACCTCCCAT ATCCAATGTA TGTTTTCAC AGAAAAACAA CAAATTAAC AAATTCACAA AATACAACAG  
CTAGAATTAC AAAATCCATT CATCCAAGGG TGGTAGAAGG CAGGATGGNA AGGTGGAAGG GTAAATNGCA CAGGGAGAAA  
AACAAAGTGT TCCAATCAGT CCAGGCACAG GGAAT

SEQ ID NO:2113: (Length of Sequence = 227 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAAATT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGGTGGGGT AAGAGACAAC  
TCCAGTGCAG TGCCAGGTGG GCAGGCTCCC ACTGTTCCTT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA  
CTCGCAGGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGT

SEQ ID NO:2114: (Length of Sequence = 339 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAAATT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGGTGGGGT AAGAGACAAC  
TCCAGTGCAG TGCCAGGTGG GCAGGCTCCC ACTGTTCCTT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA  
CTCGCAGGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGTGGG GCAGGAGGGA  
AGGCCAGTTC GTNGGCAGGC TGAGGAGGGA ATATNACCCC CCTCAAGTCC CCAAAGTGGC AGGCAAGTTA AGGGGCCCTG  
GATGAGGTGG CCCCTCATG

SEQ ID NO:2115: (Length of Sequence = 262 Nucleotides)

TGGAACACAA AATTCCTGT NTTAACAATG TACATTCGGG GCCTAGCTGC CCTTGAGGAT GTCCTAGTTA CACCCTCTCT  
GATACCTGTG GAGTTTAAAG ACCATTCTTA CCGCTGTGTC CCTTNGGAGG GGGTGCAGTG GAAGCTCTTA AAGGGGAATG  
CTTGCTCTGC CTCTGTGGCT TTTTGTPTGG GAAAGGGAGT TNGGATINGA GGATTTAGAT TINAGGTCAT GATGTCAGAG  
CACACCAGGA ACTCCCAAGG CT

SEQ ID NO:2116: (Length of Sequence = 153 Nucleotides)

AAGAAGCGAA GAGGATTGCT GAGCTGGAGC AGCGCAANAC ACGGTGCTGG TGACAGAACT CAAAGCCAAG CTCCATGAGG  
AGAAGATGAA GGAGCTGCAG GCTGTGAGGG AGAACCTTAT CAAGCAGCAC GNGCAGGAAA TGTCAAGGAC GGT

SEQ ID NO:2117: (Length of Sequence = 231 Nucleotides)

GAATATAATG TGTATCTNCA AGGNTCGATC CACCCCTNCC CATCCTNTGG AGCTCAGAGA TTCTTGGGAG CTGAAGGTCT  
TCTTAATGTC AGATCAGCAA CCCCAATCTC AGGCAGCTCG GATTGCTGTC TCTCGATCTN CCGCTGGCCA ATGTAAAACC  
AGACGCAGGC GACCCAGTGC GCGACAGGGC GAACACGGCC ATGAGCAGTG TCAGCACCAC GCGCTGTAC T

SEQ ID NO:2118: (Length of Sequence = 309 Nucleotides)

CGGGAAAGAA CAAATTGGAA TGGTGGGGGA TATGGGTGTG TGGTGGGGGC GGGGCAGGAG GTCTCTCGGG GTCCAGCATG  
GGTGGGGAGT GGGAGCAGGA CAGAAGGTGG CCACGTCACA GGGAGCTGAT GCTCAGCTCA AGGGGAGTGT GAAGAGGTG  
GCAAAGAGCT GGGGAGCCGG GCAGAGGGAC AACACTGACT NAGGACATTN CAGTTGGGAA TCAGAAAAA AGGGGCAGCT  
CAGGGGCATC TGATCTGCTT CATTTTGTAA AAAGAAACAG AGTAATGTAC AAAATTCTGG ATATCTTCT

SEQ ID NO:2119: (Length of Sequence = 308 Nucleotides)

GGTAATCGTT GAAGATTACC AAAGGTTTAT TTGGAATGAC ACAGCACTGA AACATAATT GTTACAGATG ATTTGTGGAT  
ACAGCATACA CCATCTATTT TACTTTAGAA CAATCTGTGA AGATGAGTTG CATAAATAGA AAGAGGTGGA AATATAGAGG  
AGCTGTTTTT ATAGTGTCTT TTTGGGGTA GATGAATATG CCCCATCTTT CTACCCAATC TCATAAAGGC AGAAGAGAAG  
ACTGCTTAGC TGCCCATCCC AACTAGCCTA CTTCCAGCCA CAGCGGCTGG ACAGCTAGAT AAATCAGG

SEQ ID NO:2120: (Length of Sequence = 237 Nucleotides)

CCGCTCTCCT GACGGGAGCC CACTAGGGGG TCTCTTTTCA TCTTTGGTGT GGCCTTACCT CCCACCAAAG AGATCCGAGG  
CTTACTCTTC TCCTCTGGG ACCAGCATGA CCCAGGAGTC CTTCCAGGAG AGCTCTGTGA AGGAGCTGAG GCGGCTGGAG  
GACCAGCTGG CCGGCCTGCA GCAGGAGCTG GCGGCTCTGG CACTGAAGCA GAGCTCGGTG GCGGAAGAAG TGGGCCT

SEQ ID NO:2121: (Length of Sequence = 224 Nucleotides)

GCGGTCAGAG GCTGAGGCCA GAGAGGTAGC AGCGGAACCTN ACAGGGAGGC CAGGGGCAGA GCTGACCCTG GAGAGGGATC  
CTNATGTCCT AGACACATGG TTTTNTCTG CCTGTGTCCT CTTTNTGCC CTGGGCTGGC CCCAAGAGAC CCCAGACCTT  
GCTCGTTTCT ACCCCCTGIN ANTTTTGGAA ACGGGCAGCG ACCTTCTGCT GTTCTGGGTG GGCC

SEQ ID NO:2122: (Length of Sequence = 202 Nucleotides)

CAGCTGCAGC TTCCAACCAA GAAAACCTCA AAGCAITAGG GAAGGAGCAG GTGTGGGGCT GGGGTGGGA GAATCCCTTA  
AGCTCCAGGG CCCAGGTCT AACCTGAGAG GTCGGGGCTG CAGGAAGCTG GGGGAGGCTC CCGGGGCTGG GGAAGAGGA  
GCCTGCCCCC AGCAGAAACA GCAGGTCTCA GCGGCTACAT GT

SEQ ID NO:2123: (Length of Sequence = 359 Nucleotides)

ATTCTCCTCT GTTCTCTTGA TGTGTAGGGA AATTTGAAGA ATGACTCTGA TAAAAATCTA AAAGAGAAAC ATOGAATCCT  
AACTGGCTGT GTGACCCTAA AACCTTACTC CGTCTCTTTG AACCTCAGAT TTCTCAGGC TTGGCACATA GCAAGCATTT  
CATACTCAGA AGCTGGTACT ATTACTGTG TGTTTGTGG GGGGAGGTTT GTTTGTTTTG TTTGGAGACA GGATCTGGCT

TTGTGCCCCT GGCTGGAGTG AAGTGGCGCC ATCATAGCTC ACTGCAGCNT CGCCCTCCTG GGCTCCAGCG ATCCTCCCGC  
CTCAGTCTCC CGAGTAGCTG GGACCACCTG CGGATGCCG

SEQ ID NO:2124: (Length of Sequence = 233 Nucleotides)

GAAACGCCGT GCATCTCTTG TCTGTGGCA GCGAGCACAT CGTNTGGAGA CACGAGTTTC TAAGCAGCTG GCACGAGGGC  
TGCTGACGGC ATGGGTCGTG CTTGAGGGTG GCAATACCTC TTAGGAACIT AGGGCAGGAA GCAATACTTC AGCATTGAAT  
GTGTGTAAAT AGTTGCTTG AGTTGCAATT GCTATTINCT TCTCAGTCCC AGCTCAGATC GAATTATATA TCC

SEQ ID NO:2125: (Length of Sequence = 241 Nucleotides)

GCCATGGCTT TTGGTCAGGT TCAGGGGGGC TGAGGGGGTG CTCCTCCCT CCCCCAGGC ACTGACACAT TGAAAGGAAG  
CAGAGCAACA ATGACACAGC ACGGATGTGG GAAAGGGGAT CCCCCAGCG GGCAGGATGG TCCATCTCAC CGGGGTCTCA  
CCAGGACTCC CCGCTCCAC CCAGGGCCAG CACGAGCACC TCCCGTTTC TCCCAGTGC AGAGCGTGGG GTGACAGGAG  
T

SEQ ID NO:2126: (Length of Sequence = 275 Nucleotides)

GTGTGCCCTC TTGCTGTGTC TTACTTCATA AGGAGTTGTA TCTTCCACC TGCATTTCAA TACTGCCGGT TAGGACCTAA  
GTAGAAGAGC AGTAAAGGCT GATTGACACA CAGGGGGATG GAGTTGGTCC TTGTCCATTC TCTCACCCTT GCTGTGCATG  
TATCAATCCT TATCCAGAA GGTACTATTT AGACTGTATA GACTGATTTA GATTACATAC TTTAGAGGAT TAAGGAAACC  
ATAGAGTTTG GGCCTTGAA CTGTTACTGC CTTGT

SEQ ID NO:2127: (Length of Sequence = 296 Nucleotides)

TTGAGCCTTA TCGAAACACA TGAAGCAAAA CCATTGAAAC TGTATGTGTA CAACACAGAC ACTGATAACT GTCGAGAAGT  
GATTATTACA CCAAATTCTG CATGGGGTGG AGAAGGCAGC CTAGGATGTG GCATTGGATA TGGTTATTTG CATCGAATAC  
CTACACGCCC ATTTGAGGAA GGAAAGAAAA TTINTCTTCC AGGACAAATG GCTGGTACAC CTATTACACC TCTTAAAGAT  
GGGTTTACAG AGGTCCAGCT GTCCTCAGTT AATCCCCCGT CTTTGTACC ACCAGG

SEQ ID NO:2128: (Length of Sequence = 322 Nucleotides)

GCATGGGAGG GAGGAAGAGA GGTITGGGGT GCGGTGGCAG GTGATATAGG GAAAGGGCTC ACGTTTCAGA ATCTGTGAAC  
AATTCATTT TTATCAGAT AGCAGAACAA CTACAACAGC AAAACCTAGA ACATCTCAGA CAGCAGCTCT TGGAGCAGCA  
ACAGCCTCAA AAGCCACTC CTCAGGATAG TCAGGAAGGA ACCTTTGGGT CAGAGCATT AGCGTCACCA TCACAAGGGA  
GTAGTCAGCA GCATTTTCTT GAACCTGAAG TCAATTTGGG ATGATTCCAT AGATATTGAG CAACAGGATA TGGATATAGG  
AT

SEQ ID NO:2129: (Length of Sequence = 222 Nucleotides)

TTTAGTGGGT CTGGGGTGGG CGCGGCCCCC GGCTAACGGG GCGGGTCTCC TCCTCTAGGC GCAGGAGTGC GCGGTGCTCT  
CCAGGCCTCC CCGGCTAGGT GGAGCGTGAC ACGCAAAGC ACACCGTCT ACCGAGGCGG GGCCAGGCG GCACCAGCCC  
CTCCCCAGAT GGAAGTGCCC GGCAGACAGC TGCCCAAGAC CTCACAGAAC AAAGATGGAC AT

SEQ ID NO:2130: (Length of Sequence = 191 Nucleotides)

GTGGGATGCT TTATTTCACT GTGGCGGGGA GGGAACTGG ACAGGGGGCG GCAGGCGGGG TGGNGGCTG GCACTCAGGC  
GGGACTAGG CAGGGGAAGG GCTGCCCCCA GGCTGTGTA GGAGAACTN AGGCCAGCCC TGGCGGAGAC CTAGCCAGC  
GGGTAAGGA GGGTGGGGGA AAAGTGGGTC T

SEQ ID NO:2131: (Length of Sequence = 280 Nucleotides)

CTGAGTCTTG TCGATCCCGA CCAGGAAGAG CAGCTCAGCC AGGAAGAGGT TGATGCACAG GTTCTTGTTG ATGGTGTGTC  
GGTCCGTCTG CAGCCCCCGC AGAAGCAGAA GGTGGAGATG CAGATGGCCA AGCAGACCAG GGAGATCACA ATGCCACCCC  
AGGTGATGAC CGACAGCAGC AGCTCGTTGA TCGGGCCCTG GTAGATCTCA CCGTGAGCCA TGAGCACAGC GAAGTTGGTG  
AGGTGGCTGC AGGCACACGT GGTATGGGTC TTGTGGACT

SEQ ID NO:2132: (Length of Sequence = 201 Nucleotides)

ATCCCCACAC CATGCGCTGC TCCTCCCATG GGGCTTTAGC TCCCTGACC ATCTGCTCAT GTAGCCTCTG ACTGGGCGCA  
CAGTGGTGCA GGAGGAAGGA CCGGGAACCC TGTGTGGCTT TGGGCAAGCT GACAAACCCG TCTGGAATC AGTTTCCCCA  
GCTGTGAAAT GGGGCCAGTC CCCATGCCCT GCTGTCTCC T

SEQ ID NO:2133: (Length of Sequence = 180 Nucleotides)

GATGAAAATG TTGTGACCAG AGGCTTGCCA TTNCCTAACT CTATTTGCCA GAGGAGCAAT AGTTCTGTAT TCGCTAATTT  
TGTGTTTACA GAGACTTTAA GGAACATGAC TGTGTGGAAT AACAAGAATT AAAGGTATTT ATTTACTTNC TCTATATGAT  
TGTAATATTA TACCCATACT

SEQ ID NO:2134: (Length of Sequence = 302 Nucleotides)

ATGAACAAAC GGGACTATAT GAACACTTCG GTACAGGAGC CCCCTCTTGA CTACTCCTTC AGAAGCATCC ACGTCATTCA  
AGATCTGGTA AATGAGGAGC CAAGGACAGG ACTACGACCA CTGAAGCGTT CAAAGTCGGG GAAATCACTG ACCCAGTCCC  
TGTGGCTGAA TAACAATGTT CTCAATGATC TGAGAGACTT CAACCAGGTG GCTTCACAGC TGTGTGAGCA CCCAGAGAAC  
CTGGCCTGGT TCGACCTGTC CTTTAATGAC CTGACTTCCA TTGACCCTGT CCTAACAACT TT

SEQ ID NO:2135: (Length of Sequence = 291 Nucleotides)

TCTTACCAAT CTGACATTCA CTATCAACCA CTCTTGACA CATGTCATAG AAAAGTGACA TCTCTTTCCC TTCAACCAAT  
ATATCCTCCA ACAACATCAA CCTCAACAGG TAGCTAGCAT TGTCTTCTGT TGAAATTTAG AGCTGGAAGA AAGGATTTC  
CAATCTCTCT GTGGAGACCC AGGAATCCGT TACCTTCTGG GATTTTAGAG AGTGTGGAGA GAGATGAGCA GGCAGTGAGC  
CGGGGACCAA CTCCGATAAG AATATGAAGT CAGGAAGTGA GAGAGGAAAC G

SEQ ID NO:2136: (Length of Sequence = 282 Nucleotides)

GCTGTACAAG GTCTTTTCT TTGTTGTCAT GGTGATTTT GTACATTTCA GCATTTGCAT CATACAAAGG GGGGAGCAAC  
AGCCATGGCT TTGGTTCAGG TTCAGGGGGG CTGAGGGGGT GTCCTCCCC TCCCCCAGG CACTGACACA TTGAAAGGAA  
GCAGAGCAAC AATGACACAG CACGGATGTG GGAAAGGGGA TCCCCACGC GGGCAGGATG GTCCATCTCA CCGGGTCTC  
ACCAGGACTC CCGCTCCCA CCCAGGGCCA GCACGAGCAC CT

SEQ ID NO:2137: (Length of Sequence = 322 Nucleotides)

GAATTGACAA CATATTGCCA AAATCTTAGT GGATTTTGCC AACACTATTC TGCTGATAGG AAAAAAGAAT CATTGAGCTA  
CTTTCCAATT TAGCCACAAA ATAGGCTCTT TTTTCTTCAT TACTACTTTA ACCAGTATGT TAATACTGAA AATAGGTATA  
AAGAAATCAC AAATAACCTT CTTCTGTTTG AAGGAAATTT AAAATAGCAC ACTTAAATTG AAAGINAAGG GAACTTTAAT  
TCACTACTGT AATTTTAA TGTCTGTATC ATGTAGTGT TGCACAGTTT TAACCTTAGT TTACCATCTC TTACTCTTA  
GT

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SEQ ID NO:2138: (Length of Sequence = 305 Nucleotides)

ATGCTGAGTC GCAGTTCOGA TGTCTTATG CTTCATCAG CAAATCTCAA TTTGTCAAGA TTCATGACAG ATTCTTCCCC  
AGCGTTTGGT TTAATTGGAG GGACTTTATC TCAGGCCTG CATGACTCTT CGATGCTCAG GGCACATGCC CGACCAAAGA  
CAACCAGGTC CAAGAGOGAG TTINCCCCGA GCGGTTTGGC ACCATGTACC GAGGCACAGG CGGCCTCCCC ACAGGCGTAC  
AGGCCGGGCA CAATCTGATC CTGGCCATTC ACGTGCCTCA GGACCTGCCC CTTGTAGTTG GTGGG

SEQ ID NO:2139: (Length of Sequence = 263 Nucleotides)

CGGCCCCCAG CAACAGCTTC AGCCCTCTCC ACCAAGCTTG CCATCAAGGA GATTGCACCA CTGCACTCCA GCCTGGGTGA  
CAGAGTTAAG ACTCTCATGG GGACACTACT GTTCAAAAGG CCCTGGCCAA ATAACTCCCA AATGAAACAC TCAACCCAAG  
GATGTTTTCA GCCCACTGTT AGTGAAGCTG GGTGCAGAAT GCAAAGCCTC TAAAAGGAGA GGATACAAAG TCAGGTGAGT  
AGGGGCCATT GGCAATGCTC AGA

SEQ ID NO:2140: (Length of Sequence = 255 Nucleotides)

CTGCTTCANT CTGCGCCCT CAGCTGTGGC TTCCGGGCAT GCCCTGTGAC CCCAAGCCGC AGGTACAGGA AAGAAGTTTG  
TGCTGGGGGA CTCAAAGACC CAGAGGTTAA TTAACAGGAA CCAGGGCCAG GGCCTTCAT CTAGAGGTCA GTGGAGTCTC  
CAGGGCACTC ATCACTGTGG CTGGGAGACT ACAGTGTCTC GGCTGCGGAC TTGTGGAAGA AGAGGGGGAA GGATGGGAGA  
AGGGGTGACT GGATG

SEQ ID NO:2141: (Length of Sequence = 355 Nucleotides)

TTTAATTAAA TACCACTTCA TAATGTIATT TGCACCTAGT ACTTTTTTTT TTTTAAATAA GACATGCCAT AAGTCGTGAA  
GTTAACAAAA TATAAGCATC CGCACAGAAT ATATTCTAAG GTGACTTCAT TTACACCGCT TCTCAGAGAA ACACACAAGT  
AACCTTTTGT CTGCCATCA GCCAGTGTG AAACAGCTTT GGAATTCACA TGGAAGGCTG CCGGGCTGGT TCCCCAACAC  
TNGCCTGATG GAGTCCTGTA TCCGNACCGT GCGTCAAAC TGGCTGGTTT CCACTAGAAA AGCAATGGAG AGTCAGCTCT  
CCCTTCMTTA CCCAGCGTTC AACTCCACAC TGCAA

SEQ ID NO:2142: (Length of Sequence = 391 Nucleotides)

CTGCTAAGTG CCATGAGACC TTAGCAGAGG CTGTGGGTGC CCCGCCCCAT TCCCTCCACT CACTCTTCCT TGCAGGTGGA  
CCTGCCCTTC TTTGCTGAGG CCTTCTCTG CCTCCAGAGC CTGCTTGGTC CTCAGGCTGT AAGTGCAGGC AGAGCTAATG  
TCTCTCCATA GCTGCCCTCC ACCAGCCTGC TCTGAGACA CCTGCTGGCC AGCAGCCTGA AGCAGAATCC TTTACTCAGA  
TTCAGCCGCA CAGATGCTCA CTGCAGAGAT CTCCAAGNC TGTGGTCATC CTTGAGCCCA TCTCAGATTT GTGTGGATAG  
GGTGTAGAG AACATGGAAT CAGCTGGATA GAGTGGTTCA TGCTTGTAAAT NCCAGCACTT TTGGGAGGCT T

SEQ ID NO:2143: (Length of Sequence = 326 Nucleotides)

GATGCAGAAC AGCTTCTTGC AGAAGCACCT GCTCCGGCAT CCAGCGCTGC CTGGAGGCAG GAAGGAGAGG CAGGGCAGGA  
CACGCTGGTC TGAGATGAGG GGGAGCCCCA CGGGCCCCAG GCAGGCTAGA GGAGGCACAG GCCCTGCCAC GGCCAACTCA  
GGTCAGCCAG CCTGAGGCTG TGGCCTCCAA AGGGTCTGGG CGCACCCCCC AGGTGCGAGG TTNTGAGGC CAGCCAACCT  
GCAGAGCACT CGCGCGTGG GTGGGCTGAG TGGAGGTGCC TGGGAAGCTG CTTAAATTCA GAAGCCTCCA CTTGCCATGG  
AGACTG

SEQ ID NO:2144: (Length of Sequence = 357 Nucleotides)

GCACCGGGCC CCAGGAGCCC ATCAGTGACA GAGTGCTCCA TGATGATGTC CTCCACCGG GTGATGTACA GCAGGTCAN  
AGCACCCCCA GGAAGTGGGA NAGCAGGATG CCCAGGAGGA TGCCCGCCAT GATGGTGTAG TTGTCCATGA ACCAGATGAT

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CACGGCGTTG GTGCAGCCCC GCACGTAGAT GACATCCTGC AACTGAAAC GTCCTTGTC GATAGTTTIN TAGCCACACA  
TGGTGTGAC AACTTCTGTC GTGTCTCTGA TGCAGCAGGT GTAGGGCACC CCACAGGCCA GGGGTCCAGG GGCAGTCAG  
TCGTGCTACT GATTCTTGCT CCAATCTCGG TAGTCT

SEQ ID NO:2145: (Length of Sequence = 420 Nucleotides)

CGCCAGGAGC TGCTAGCCAA AGCATTGAG ACCCTACTGC TGAATGGAGT GCTAACCCCTG GTGCTAGAGG AGGATGGAAC  
TGCAGTGGAC AGTGAGGACT TCTTCCAGCT GCTGGAGGAT GACACGTGCC TGATGGTGTG GCAGTCTGGT CAGAGCTGGA  
GCCCTACAAG GAGTGGAGTG CTGTCAATATG GCCTGGGACG GGAGAGGCCA AAGCACAGCA AGGACATCGC CCGATTCAAC  
TTTGACGTGT ACAAGCAAAA CCCTCGAGAC CTCTTTGGCA GCCTGAATGT CAAAGCCACA TTCTACGGGC TCTACTCTAT  
GAGTTGTGAC TTTCAAGGAC TTTGGCCCAA AGAAAGTACT CAGGGAGCTC CTTCGTTTGG ACCTCCACAC TTCTGCAAGG  
CCTGGGCCAT ATGTTGCTGG

SEQ ID NO:2146: (Length of Sequence = 390 Nucleotides)

CCCAAATACT GTTTCCTCAA CTATGTCGGG CGGCGAAGC ACATGCGGGT NATGGCTGGA GCCCTGGAGG GGGACCTCTT  
CATCGGACCA AAAGCAGAGG AGCACCGGGG GCTGCTGACC ATCCGCTACC CCATGGAGCA CGGCGTGGTG CGAGACTNGA  
ACGACATGGA ACGCATCTNG CAGTACGTCT ACTCCAAGGT TCAGCTGCAG ACCTTCTCGG AGGAGCATCC TGTGTCCTC  
ACGGAGGCCG CGCTCAACCC GAGTAAGAAC CGGGAGAAGG CGCAGAGGT GTTCTTTGAG ACCTTCAACG TGCCGGCCCT  
GTTCATCTCC ATGCAGGCTG TTCTCAGTCT GTACGNAACA GGACGCACGA CAGGAGTGGT TCTAGACTCA

SEQ ID NO:2147: (Length of Sequence = 219 Nucleotides)

TTGTGTTTG GAGAGAACT GGTGTTCTGC CCGGCTCTGC TTGGTCACAG ACAGCTCCAG CAAGAGCAGT TGTAAAAGT  
GCCAAGCGTG TGTATCACTG TGACAAGCCG TTTGCTTACT GCCCTGTTCC CTTCNAGCCA AACCAGCTGA TGAAGAACTG  
CTGCCAGNG GGTCTACAG CAGGTCAAA ATGACCTAGT TTCAATTTAA GCAGACAGA

SEQ ID NO:2148: (Length of Sequence = 353 Nucleotides)

GAAATCTTTA TTACAAAAT ATTTTGCAAG CCAAAAAGTT TAAGTTGCAA CTATATACAA AATGGGGCCT GTTCTCTCC  
CAGCAGTCTT AAAATAAACT CCTGAAACCA TGCTCCTTCC GCAGGTGGT TCGACCTCTT CCTTTCTCTG GGGTTCAATA  
CACAAGGTAT GTGGATTCTC CAGGTGCGCA GGCTAAAGCT AAAGCTATAC ATCTTCTTG GCCTTATTCC CTTATTTCCC  
CCTCCAAGAA TTAATAAATA AAATAAAATG AAAATGGCAC CAAGAAAACA TTCTTTTAAA ATACTGAATG TGTGTGTGCA  
TGCGTGTGCA CAGTATGTCC CTGTTCTCTG GGT

SEQ ID NO:2149: (Length of Sequence = 394 Nucleotides)

GGGGAGACTT TGGGCTTTNN TCATGACTGT TTGGGTCGAA GGTAGCTCAA GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT  
GTGTGTGTGT GTATGTGTGT AAAGTGCTAA GAACTGTGCA TTGACATCCA AACATTTCTT GTACAAAATT TCCCTAGCAA  
AGCAAACCTG CTTTGACTTA ATTTATTTGT TAAATGTTGC ACTTTGTTTA TGTATGTTT GTTTTGGTG GGAATAAGG  
AGAGAGAGGA CGACAAATTC TATTGAAGTA TTTATTTTGT GAAGATGGCA ATTTTGCATT TGTTTAAATA TTTTTCATTC  
NNTTAATTTT GTTATCAGTG CCAGCCCAAN ATACCTGCTC TACCATTAAT TTGCGGGCCT GATAAAAAGG GTCC

SEQ ID NO:2150: (Length of Sequence = 200 Nucleotides)

ACCTCCCTGG GCCTCGGAGA CGCTGACAGC TGGGACGACA GCAGCTCCGT CAGCAGCGGC ATCAGCGACA CCATAGACAA  
CCTCAGCACT GATGACATCA ACACCAGCTC CTCCATCAGC TCTTATGCCA ACACACCTGC CTCCTCTCGA AAAAACCTGG  
ATGTGCAGAC TGATGCTGAG AAGCACTCAC AGGTGGAGAG



SEQ ID NO:2151: (Length of Sequence = 369 Nucleotides)

GTGCGCCCCA GTCCTTCTGA AACCTGATAT CACACTTCGG GCACTGTCCC CTCTACAGTC AATCTGTGTT TTCAGAAGTG  
GCCCCAGGTT CACTCGTCTT ACAGCAGTCC TAAAGAGCCG GCTGCCCTTT CCTAGGCTT CCTTGCTCTT NAGGGCTAAA  
TTCCAGCCCT CCTACCCAG TGCCACTTGG GTAAAAATAC TCTGCTCTC TCAGTTTGC TAATAAGCCC GGGCTCCGAC  
TACCACCGTT CGGGGAAGG GAGCCCTTA CCGTCATTGC TGGTCCGCT CCGGAAAAC ATGTGCCGA CCTGACTTGT  
GCGGCGGCAT CTTCCGGAA ATGCCGTTT TGTTCCTTC TAAGGGTGT

SEQ ID NO:2152: (Length of Sequence = 312 Nucleotides)

TTCAAAACA AATGTGGGA GAAACACACC TTCCAGCAA TAGAAAATCT CTATAAAGTG CATTTTGCCT GCAACCATCT  
CTTCCCCATG CTGGCCCTTG GGTGAGATT TGAGGCACTG TTCCAGGGA GCCCTCAGG CCACCTGAGC TGGGAGAAGG  
GAGGCATGAA GCCACCATGG AGCTCCAGG TACTGGACAT ACCCTCTCTA CCCTGCCCTT CCCTTNTGGC TCCAGGAGTG  
CACTGCCTGA CTCCACTGGC AGGTTGATCT GGAACGGGC TNGGCATGCT AGGGATGGTG GAGAAGTAGG CG

SEQ ID NO:2153: (Length of Sequence = 325 Nucleotides)

CCCAGACCCA GAATGTAAAT NAGGCCAAA TGCCACTTC CCAGGCTGAC ATAGAGACCG ACCCAGGTAT CTNTGAACCT  
GACGGTGCAA CTGCACAGAC ATCAGCAGAT GGTTCAGG CTCAGAATCT GGAGTCCGG ACAATAATTC GGGCAAGAG  
GACCCGAAG ATTAATAACT TGAATGTGA AGAGAACAGC AGTGGGGGAT CAGAGGGGG CCCCACTGGC TTGAGGGAC  
CTGGNGGTCT GCACCACTTC CAGTGACCAC TTCAGAACCC ACCTNGGNC ACCCCCCAAT GTGCTCTGGC AGACGGCATT  
GGCTT

SEQ ID NO:2154: (Length of Sequence = 326 Nucleotides)

ATCATTTAAT TAACATCTTT AAATGAAACA CAGTTTTCTT CATGTGCTC ACTCAGGCTT CAGGGCAGAG GGAATGGATT  
TTTAGACATA TCAAGACTC AAAAATTTAA AGAAATATAT ATATGTATAT ATATACTTCT AACATTTTAT GGAAATTAAA  
AATCAGAGGC TTTTGGTCTC TCCATTACT CTAGGTCAAG CTCATTTACC CCAGAGGACA AAGAAGGGCT GCTCTTCTA  
GACCTCCCT TCTCCTTGT CTNTGTCCC ACCCAGCAGG GAAACAAGCT CAGAAGGATC CTAACAGGAT AGAGTTTCCA  
GTAAAT

SEQ ID NO:2155: (Length of Sequence = 317 Nucleotides)

TGGATGAGGA GACCTGAAC ACACCTGCT ACTGNCAGCT GGAGCCCAGG GCCTGTNACA TCCTGCTGGA CCAGCTGGGC  
ACCTACGTTT TCACGGGCGA GTCTATTCC CGCTCAGCAG TCAAGCGCT CCAGCTGGCC GTNTTCGCCC CCGCCCTCTG  
CACCTCCCTG GAGTACAGCC TCCGGTCTA CTGCCTGGAG GACACGCTG TAGCACTGAA GGAGGTGCTG GAGCTGGAGC  
GGACTCTGGG CGGATACTTG GTGGAGGAGC CGAAACCGCT AATGTTCAAG GACAGTTACC ACAACCTTGC GGGCTCT

SEQ ID NO:2156: (Length of Sequence = 372 Nucleotides)

CTTCCAGCTG GCAGCCAGT GGCCACCCA TGTCAGCAC TTTCCAGTGG GACTCTTCAG TGGCAGCAAG GCCACCTGAG  
GCCCTGTNTC CCAGCCACTT TCCCTCCTGG CACTGCCACC AGCCTCACC AGTGGCGCGA TCTCGGCTCA CTGCAGCCTC  
TGCTCCCGG GTTCAAGCAA TTNTCTGCC TCAGCCTCCT GAGTAGCTGG GACTATAGCC GCGTGCCGCC ATGCCAGCT  
AATTTTGTGA TTTTGTAGT AGACAGGATT TAACTATGTT GGCCAGGCTG GTCTTGATT CCTGACCTCG TGATCCGTNC  
TCCTCAGGCT TCAAAAATG CTGGGATTAT AGGCATGAGC CACCACAACC GG

SEQ ID NO:2157: (Length of Sequence = 351 Nucleotides)

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CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA  
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC  
CAGCGTCCCC TCCAGTCTGC ACGGGCAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC  
CCTCTATCCC TCCCAGCACC TACTACATCG NCCINACAT CCCTGATTCC TGTGTATG GAAACTINTG CCAGAGATGG  
AGGTTCTCTC GGAGTATCTG GGAACGTGTC C

SEQ ID NO:2158: (Length of Sequence = 280 Nucleotides)

CAGCTCCTGA GGACCGCTGC AGTGATGACA CAGGACTATT GCATCAGCAT CGTGCTACA GGAATCAGA GCTCAGCCAG  
GAGAGGTCCA AGAATGACAG AACCATGAGC ACTCCTACCA AAATCAGCT CTGCTCAGCC AAATCAACAA TTCAACCCAA  
CAGGNCAACT CCTAACACAT CCCATCCAGA CAGACATTAG AGGCGCACAG CAGATGAACC TCCTACTTAC ACTGTCCAAG  
GAAGCTGGAC TATCAATTCC CAGTAAAAGT GGGGGAAGG

SEQ ID NO:2159: (Length of Sequence = 342 Nucleotides)

CTGTGCGTT TCTCCTACCA GATTGTGCAT GCCTCTGTG GGCAGAGCCT GTNCTGACTT GCTCCTGGGT CTCCAGCATC  
ACCCAGTCTG GAGCTGAGGA CCTGGGTACC TACAGATTTC CTTCACACT GTCAGAAITG AGATGAAGGA AGCCAGAGA  
AATCAAGTAC CCTCCACCAG GCAGAGCAAA GTCTGGGTG CCCAAAATCC AGGGAAGGCA AGGGCTGGGG GTACAAGCAG  
AGGATCTGAA GAGGTATATG AGAGTNGCCA GCACAGACCT GGCATAAGCT TGGTGCTCAG TGAAGGTTAC CTGATGTTGC  
TGGGCACCAG GGGTGATGCA GT

SEQ ID NO:2160: (Length of Sequence = 376 Nucleotides)

ATCTTAAGAC ACATATGGAA AACAATAGGG TAGAACTTAG TAACTACAA GAATATAAAT TGGAGCTAGA TGAAAAGGCA  
GTGCAGGCAG TAGAAAAATT AGAAGAAATC CATTTCACAG TTAGTTTTT AAATCAGGTA AGTTTATCTG TAATGTGCTT  
TCATTTATTT CACCGCAAAT TATATTTTGG ATATGTATAT ATTATGTTTC CTCTGCCTCT CTGTAGCAA TTGCTTTGT  
AGAGTCTAG AAAAAAATG GCATCTGTTT TTCCTTTTAA ATATTACAT TTCCATTATT ATTATAACAA AATCAATCTT  
TCAGAGTAAT GATTCTCACT GTGGAGTCAT TTGATGATTA AGATCCAGTT GGCATA

SEQ ID NO:2161: (Length of Sequence = 404 Nucleotides)

CCTTCCTTCG GTTTCACCTG GACTTCTATC AGGTCTACTT CCTGGCCCTG GCAGCTGATT GGCTTCAGGC CCCCTACCTC  
TATAAACTCT ACCAGCATT AACTTTCCTG GAAGGTCAAA TTGCCATCCT CTATGTCTGT GGCCTTGCCT CTACAGTCTT  
CTTTGGCCTA GTGGCCTCCT CCTTGTGGA TTGGCTGGGT CGCAAGAATT CTGTGTCTCT CTCTCCCTG ACTTACTCAC  
TATGCTGCTT AACCAAACTC TCTCAAGACT ACTTTGTGCT GCTAGTGGGG CGAGCACTTG GTGGGCTGTC CACAGCCTGG  
CTCTTCTCAG CCTTCGAGGN CTGTATATC CATGAGCACG TGAACGGGC ATGACTTTCC CTGCTGAGTG GATCCCAGCT  
AACC

SEQ ID NO:2162: (Length of Sequence = 339 Nucleotides)

CACTGCCTTT TTGTAGCTTG GGATCTAATT TGTAACACCT TGCTACCTAT GAAAAGTGGG AATGTAAAAG GGAAAAGCA  
ACTTGGCATT TACTAACTT AGGCTAACCA AAACCTCTG TAGAGATCCT TACTAGACAT GGGTGCAACA GCAAGCATCC  
CAGAGGACCC ACCACTGGGG TATGTTTATG GCCAATGGAG CAAATTCAAA TTTGGCTAAA AGAAGAAGAA ACTCATTATG  
TATGGCAATA ATATTGCGT TCGACACAAA GTGGCAAACC AACACATTTG GCCTAAACAT GGTCTATAT GTTATAATGA  
TACTTTACAA TTAGACTTC

SEQ ID NO:2163: (Length of Sequence = 285 Nucleotides)

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CCCCGCCACC TCCAGCAGGA GCAGCTCAGT TTGTGGCTCT GGGAGCTCCG CTTTTCGAAA CCCAAAAAGG CTGTGCATTT  
 GGAAGCCAAA CGCTCAGCAT GCGGCTGCCG AGTCTGGTTT TGTGGACAAA GCAAAGTGTG GAATGGCTTC TCGGTGTCG  
 TATAAAGGGA CAAACGGTTG CATTACCCCT TTGTACTATA ACACCGCTTC TGCATTGCC ATATCCGTTT TTTAACCTTT  
 TTGTCTCCGG GGAACCTCTC ATTCGATTAT NATGCTCTCT GATGA

SEQ ID NO:2164: (Length of Sequence = 296 Nucleotides)

ATGTTTGTA ATCACTTCCT TTTCTACAA TATTTCTAAT AAGAAAGCTT ATAACAGCAC TTTATTGACA CCCTCGGACC  
 CGGGCAGGG TCAGCAAGAC TCCAGCTGG CATCAGACTG TGCTGGCCT GCTGTGCCA TCCCTGAGGG GTGCAGGACA  
 GAGCCCCATA GGGCAGAGAG GCCTCCCTGG GACCAGAGGA GGATGCTGTG CAGCCAGGCC CATCCCCAGC ACTCGAGGCC  
 TAGGAGGAGA GGTGGGCTCT GGCAGCGGT GTNAGGTGGC AGTGAGAAGC CAGGCC

SEQ ID NO:2165: (Length of Sequence = 310 Nucleotides)

GTTTTTGTA TGTTCCTCAA ATAATGTTTT TCTGTGTGTG TTTTTTNCCT TTTTTTGGAC AGGNTCTCAT TCCCATTGCC  
 CAGGGTGGAG TGCAGTGGTG CGATCTCAGC TCACTGCAGC CTGACTTCC CAGGTTGAGA TGATTCINCC ATCTCAGCCT  
 CCCGAGTACC TGGGATTACA GGCACACACC ATCATGCCCG GCTAATTTTT TGTATTTTTA GCAGAGACGG GGTTTTGCCA  
 TGTGACTCAG GCTGGTCTCG AACTCCTGGG CTCAGAGAT CCGCTGCCT TGGCCTCCCA AAGTGTGGG

SEQ ID NO:2166: (Length of Sequence = 361 Nucleotides)

GATGGAACCT GGAAAAAAA TAATTGTAA GCAACAATTT TAGATTTTTT TATGGAGGAT AGAGACATTT GAATCAGATA  
 CCAAGAAATG TATAGTAATC ACTCACATAG AAAGATGTCT AAAATGGATT TTAAATGGGA TCGGGGAAAG CAAGGTGCTG  
 AACACATGC TGTACATACT ACTTATAAAT CAAAGCAAAC CACTAGCAA CTGATGTCAG TACTAACACA GGTGGAAGTG  
 GGATTGTGGC GGAGGGGAGA GGTAGTINAGG GTAGACTTAT TTGTACCATT TTNATTTTTG ATATTTCTTT TATATACAGA  
 TACATAAGTC TGTATATACA TGTATGTCCA ATTATCTCT T

SEQ ID NO:2167: (Length of Sequence = 325 Nucleotides)

TCCTGGGCTG TGCTCTGTTT GAAGGGGGCG CCTGCTCCC CTCAGATCAG TCAGGAGGAA GATGACTAAG GGGAGGGATC  
 CTCTGGGTGA TGGCCTCTTC CTCTCAGGG ACCTCTGACT GCTCTGGGCC AAAGAATCTC TTGTTCTTC TCCGAGCCCC  
 AGGCAGCGGT GATTCAGCCC TGCCCAACCT GATTCTINATG ACTGCGGATG CTGTGACGGA CCCAAGGGGC AAATAGGGTC  
 CCAGGTCCA GGGAGGGCG CCTGCTGAGC ACTTCCGCC CTCACCTGN CCAGCCCTG CCATGAGCTC TGGGCTGGGT  
 CTCG

SEQ ID NO:2168: (Length of Sequence = 348 Nucleotides)

GGAGAACCCT TCGCGGAGGA AAGGCGAACT AGTGTGGGA TGGCCACCAA CTGGGGGAGC CTCTGTCAGG ATAAACAGCA  
 GCTAGAGGAG CTGGCAGGC AGGCCGTGGA CCGGGCCCTG GCTGAGGGAG TATTGCTGAG GACCTCACAG GAGCCCACTT  
 CCTCGGAGGT GGTGAGCTAT GCCCCATTCA CGCTCTTCCC CTCACTGGTC CCCAGTGGCC TGCTGGAGCA AGCCTATGCT  
 GTGCAGATGG ACTCAACCT GCTAGTGGAT GCTGTCAGCC AGAACNGNTG CCTTCCTGGA GCAAANTCTT TINCAGCACC  
 ATCAAACAGG ATGACTTTTA CCGCTCGT

SEQ ID NO:2169: (Length of Sequence = 392 Nucleotides)

ATTTTGTGA GGTCCAGTTT GGTGGCAGA AACTAAGACA CTGAGCTGAT GAGAGAACTT GTTGCTTTTC GCCCTGCGCA  
 TTTATTATT TATTATTTA TTATTTTTG TATTTTATG AGAGACAGAG TTTCACCATG TTGGCCAGGC TGGTCTCAA  
 CTCCTGACCT CAAATGATCC ACCCACCTCG GCCTCCCAA GTGCTGGGAT TACAAGTGTG AGCCACCATG CCCGGCCACC

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TGTTGCATCT TTAACAGCTG TGTGTTGGAAA AGGGTGAGGA ATTGATTTCAT CAATATTCAA TACTAAGCTG CAAAATCAGG  
AATGCAGCCA ATTGGTTTAA TTGATCAAGG CTTATAAACT CTTAAGGGAC TCTAGTGAAC TGATACAAAC TA

SEQ ID NO:2170: (Length of Sequence = 273 Nucleotides)

GTGTTGTTG ATGCTGTTGT TGTGCTTTC TGTGTTTTC TCTGCAATG GTCAGGTCCC ACTCTGAACT CCGGGGGGCA  
CCAACTGAT GCCAGTAGGA TTGCCCTTGT ATAGGGTGTG TGACAACCCC TGTGAGGGT CTCACCCTGT TGGGTGGCAC  
ATGGAATAGG ACCCATTTAA TGAAGCACTT TNCCTTGG TGGAGGTAGT GTGCTTINCT GGGGAAAAC CCACTTGTCT  
GGGCTGCCG GATTCTCAG AACTACCAGG AGG

SEQ ID NO:2171: (Length of Sequence = 357 Nucleotides)

GTGATGTACC CCAGCACTAG GGAATGATGT GAGTAAGACC TAATCCCTGC TCTCAGGGAG CTTATAGCCT ATGGCAGCAG  
CAACACTAGT AAAAATTTAC TACTTTGATA GGTGCACATC TTCTTTGGT CAGCAATTTT CTCAAACCA CTGTAACATT  
TTACTAAAAT GCTAAGCTTT GATTGTTTTT CAACTACTTC TTGAGAGTTT CTGCATGTAT GATAAGGGCA AGACATTACA  
CTGAGGTATT GATGCTGATG AGCAGCAAGG CTCACTGGCT GGTGAAGGGA TACTGATTAG CACACCAATG TGCTGCTCTT  
GAACACACAC CTCCACAAA TTACAAATTA TCTTCCA

SEQ ID NO:2172: (Length of Sequence = 381 Nucleotides)

GAAGAAGGCC CATGGAGCTA AGGCCTCAGA ACACCAAAGT CTGGACTGTC TGAGGGCACA TGCTAATAAC AGGAGGCTGG  
CAAAGTGGCC AGCTCCCATG CCTTTCATG CATTTNCTT TACCTCCTGC TGCCTGGGAA CATCTTCCA GGAGCAATCG  
AGTCAACAGC ACCACAGACA CTGCTATTCC GTTGAGAAAA GTTTTATATG GAAACACATA CTGATCATGA ACACAATAAA  
CAGGGAGGGA AGCTCGGGCT CAGCCAGGAA ACCTGCCACA AGGAAGATGT TTGGAATAT CCAGGAGTAG TGTCAAACAC  
TAACACCATA TTTACAAGTC TAATTTGGAA CTTGGGCCCT TTTAAGTGC AGGAGGAAGT T

SEQ ID NO:2173: (Length of Sequence = 351 Nucleotides)

GAAGTTCCGG GAGCGCCTGA AGGAGCTCGT GGTCCCAAG CACGTCATGG ATGTTGTGGA CGAGGAGCTG AGCAAGCTGG  
GCTGCTGGA CAACCACTCC TCGGAGTTCA ATGTCACCCG CAACTACCTA GACTGGCTCA CGTCCATCCC TTGGGGCAAG  
TACAGCAACG AGAACCTGGA CCTNGCGCGG GCACAGGCAG TGCTGGAGGA AGACCACTAC GGCATNGAGG ACGTCAAGAA  
ACGCATCCTG GAGTTCAITG CCGTTAGCCA GCTCCGCGG TCCACCCAGG GCAAGATCCT CTGCTTCTAT GGGCCCCCTT  
GGCGTGGGTA AGACCAGCAT TGCTCTGGTC C

SEQ ID NO:2174: (Length of Sequence = 308 Nucleotides)

TCATTAAATA GCTTCTATGC CACACTCTGA TTAAGCCGAC TGAGGTCCCT GGGATCTGGG TCACTGGACC GAGCTGCTCG  
CTCGGTGGCT CCACTGCCAG GTCGGGGCGG GCTCCCCACA GCGCTCAGTT CTGGCCGAGA CAGGGCCTGA CATCCGCGCG  
CTGCAGTCCC GGGGTGGCCG TCACCGTTCC ACGGCCAGNG ACTCTNCTG CTGTCGGG AAGGCGATGT CGAAGATCTC  
CCGGTAGTNT TCCACGAAGG TAACCTCCAG GGCCCTCGGT GATGAAGGCT TCCAGGTCTG AGAAGTCC

SEQ ID NO:2175: (Length of Sequence = 403 Nucleotides)

CTTGCCCAAG GGCCTGAGCT GGTGGAGGCA GAGCAGGAGT TGGATCCAGG CCTGTNTGAG GCATCCTGCC ACCTCCATCC  
AGACCTGGAG CAATCCCTGA GAAGGTGGC TACCACCAGA GATGTGGCAG CTCTGGTCTC AGGAAGCATA GCCGGAGGAT  
GTCCCAGGCA ACCAAACAGC CATTCATCAG TAAGGAGCCA GAGTINAGGC TGCTAGTTCA GCGCCGGAA GGTGGTCCAG  
GGGCAGCCAG TNCAGAACTC AGCAGGAGCT CAGTTCCAAC TGAGCCTGAT TTCACTCCAG TGCCACAAG GGACATCCTG

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ACCTGGAGGT CCTCGGCTAC TCACCCTGGG GCTTCTTGC ACAGCCCAGG AGCTAGCCCA GGGCTGCCTC TAAATGGTTC  
CCG

SEQ ID NO:2176: (Length of Sequence = 399 Nucleotides)

AGGCAACTAT TGAGGGAAGA GGCAGAAAAA GGAAAAAGGA ATGTACGTAA GGCAATTTIN CTAAAAAGTA CAATAAGCTT  
AATAGTGTIT TAGGAAGACA AGATAAAAAT TACTCAAGGC TAGCTTGGIT CTCACGAAT AAAAACAAAG GACTAAATAC  
TGAGCTCCTT CTGTGTGGAT CTAATAATCA ATGCCTTGGT CGCTATATTG GTAATCTCTG GGGTAGTCAT CCTGGTACTC  
GCCATGATAC TCATCAGGGT ATTCTGCCTG ATAATCATA TCACTGATTT CCGAACCATT TGTTCTGTIT CCTTGGCTTC  
CGTTGTGAAT GACAGGTICT GTAGGAGCAG CACAGTATTT GGGGATCATA TACTTGCCGN CCAAGGCCAT ACAAACCTCA

SEQ ID NO:2177: (Length of Sequence = 302 Nucleotides)

GGTTTTTATA AAAATCAGAA TTTTCAAAAT GCATTGGTCA TTTTCAGATG CATTGGTCAC ATTTCATTAT TCCATATCAA  
AAAACCTGCAT TTGTTAATGT CACACAAATC TCATTGGAAA GGTCTTCAAG TATTGTGAAG TTGTCCAGGT CACAAAGATG  
AATGCTAGTT TTTCAAAATT CTACTTTTAA CTGAATGCT CAAATCTTAT AATTGGTAAC CCGTCCAGTT TTTCTTTAGT  
TGATAGGCTT ACTGCTTTTA TGTTGTGAGA ATACTTGTCT GTGAAACATC CAAATCTGGA AG

SEQ ID NO:2178: (Length of Sequence = 343 Nucleotides)

GGTTTCACTC TCCTTGCCCA GGCTGGAGGA GCAATGTCAT GATCTTGGCT CACTGCAACC TTCTCCCTTC CAGGCTCAAT  
CAATTCTCCT GCTCAGCCT CCCGAGCAGC TGGGACTACA GGTGCGTGCC ACCATGCGCA NTAGGTTTTT TTTTGTAGA  
GACAGGGTTT TGCCATGTTG CCCAGGTTGG TCCTCAACTC CTGAGCTCAA GTNATCTGCC TGANGTGCTG GGATTATAGG  
GTINAGCCAC CACATCCAGC CTCCTTTTAA TGTTTGTGTG ATTATTTATA GTGAAAGATT TAAATTCCTT TCTATTTCTT  
TGTTGTATAT ATTCTATAGG CTA

SEQ ID NO:2179: (Length of Sequence = 377 Nucleotides)

AGATCATCAG GAATTAGATT CTCATAAGGA ACACACAACC TAGACCCCTC AGAGGTGCAG TTCACAGTAG GGTTTCATGCT  
CCTATGAGAA CCTAATGTTG CAGCTGATCT GACAGGAGGC AGAGCTCAGC TGGTAATGCT CACTCACCTG CTGCTCACCT  
CTTCTGTGT AGCTCGGCTC CTAATAGACC TGTATGTGTC CATGGTCTGC GAGTTGGGGA CCCCTGCAGG AAGTCTTGTA  
AATGCATGTC AGGAACTTA CTGTTTACAG CCACATAGTT TGTAGTAGTA AGGAACTAG GACAATTCAA ATATTATCA  
NGGGGAAAAC TGGGATAAAT TGTGGGTCAA TTTTCATATG TTCATACAGG AAAAAAG

SEQ ID NO:2180: (Length of Sequence = 195 Nucleotides)

GATATTGCT TTTCTCAGAA CCATAATCGA TACAAGATGC AGTGACCAAT TCATTCTTAA AAACACCTGG GCTCCTTAAG  
CGGCTAGAAG ACACAAGTTA CATCCAGCCC ATCAGGGAGC CAGAGGGNGA GGGGTCCCA GCCAAGCTCT GGNCAGGCCT  
GCCATGGGGC AGNCCTGAC GTNCAGCCA GAGGT

SEQ ID NO:2181: (Length of Sequence = 244 Nucleotides)

TTGGGTGGGA ACGGGCCCGG AGCGGGAGGA ACGTGAATCC CCAGAGGGAA GATGGGCATC ATACTGGGCC CAGAGCTGGG  
AAGGAGTTC TGCCAGCACA GGGTGGGCT GGAATCCCTT CGCCCTTACC CCCAGTGGTT GTGGCTGTAG CCTAAGCCT  
GGAGAGCAGG ACCGGCCCGG GTGTGTTGAG AGGCTGCCAG GTGCCTCCA GAGCTCCCA GGGCCCCAC CTGCAAGTNC  
CAGC

SEQ ID NO:2182: (Length of Sequence = 287 Nucleotides)

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CTCCTTGAGT CTGTTGACAC GTCACATGGT CAAAGTCTCC TCATTTTCAGC CAGTCTCAAC ACAAACACC CAACAGGGAT  
GCACTCAACT TGTTGGTTCC ATGTGGAAGT AGGTGGCAGG GCGAGAGGGA AAGTAGTAGA AGGGGGCTAT GGTGTGTCTG  
CATTCAGTCC CCTCACATAA AGCCACATGG ATCTAGGGGG GTATCCAAGA GCTCTGGTGG GGTCCGTGTT GCACCTAAGA  
CATTATAGGT CAGAGCAAGT TGCTCAGAGG GTTCCAGGCA GGGGGCT

SEQ ID NO:2183: (Length of Sequence = 389 Nucleotides)

GATCCAGAGA GGGCTCCAGG TGGAGTCCCT TTTTCTGCAT AAGGGGCTGT GACCGAAGCA CAGAGGGGAA AAAAAAAGT  
GGTGGGAGCC TCCTCTGGTT TCACCTGAAG AGGGAGGTGG AAGGGCCTGA AAATTAGATT TTNTTTATAA ATAATAGATA  
TTATAGGTAT ATTTNCATAT TTTTACATAA TGATCCAAC CACAAACAAT GGACCATAAA GCACTGACCT CAGAATGATC  
AATTGCAAAA TGTTTAAACC CTGGGAAGCT TTTGCTTAGG AGGGCGGATA TTCTGTGTG ATGTTATTCT ATAGCCATAA  
ACTTCCCTGA ATTTNCTGCT AATGTATCCA AGTCCAGGGA AGTCACTTAA AACTCTTCAA ATGCAGCTT

SEQ ID NO:2184: (Length of Sequence = 383 Nucleotides)

GCAAGAGAAG CGGTTTGGGT CTCTGAAGGA AAGGCCAAAA CCCAGAACAA AGAAGAATCC TATGACTTCT CCAAATCCTA  
TGAATATAAG TCAAACCCCT CTGCCGTGTC TGGTAATGAA ACTCCTGGGG CATCTACCAA AGGTTATCCT CCTCCTGTTG  
CAGCAAAACC TACCTTTGGG CGGTCTATAC TGAAGCCCTC CACTCCCATC CCTCCTCAAG AGGGTGAGGA GGTGGGAGAG  
AGCAGTGAGG AGCAAGATAA TGCTCCCAA TCAATCCTGG GGCAAAGTCA AAATATTGA GGAAGATGNN TCCACAAGGC  
CAGGTTACAG AGGAATGCAA GGAGCTTCCA GGAAGCACAA GAATTCCAAG TTTTCGGAAA TTT

SEQ ID NO:2185: (Length of Sequence = 359 Nucleotides)

CTTTAATTCA CATCACAGCA GTCAAGGAAG TGGGGAAAGG GGAAAAAAT CAAGTGGCAG ATATTTACAT CTAAAATTCA  
CATTACTTGT TGGATTTTGA ACATGCTACC ACAATATATA CAGTAAATA CCTCTTGGGA CAATGGTACA AATTTTGTIT  
CCTTTAACIT TGCTTTTCTG GTACAGGTAA GATCATTTTT AAATCACTTT TTTNCTTTAA ACATGAATAC ACAAAGAAA  
TGGTTAGAAG TTTCTTGT TTAATAAGC ACAGAATGCG GGAGGTTAAA AACACATTTA TAGTGCTGAA TACCAATTGG  
NCATCACACT CTATACATTT TTTGCTCAAA TTCTGTAC

SEQ ID NO:2186: (Length of Sequence = 337 Nucleotides)

ATAGTTATAC TCAGTGAAAT TAACAAGACC CAAAGGTGGT ATGTCTAGG AATAAAAGGG ATAATTTTGT TTGTTCAAA  
AAGTAACITG TCTAGCACCA CACATCAGAA AAACACAAA ATAGCACACT CTAGTTCTAA ACAGCTATGT CTAAAATAGA  
TTATATAGTA AAACCGGTAT TATACAGCAT ATTGTGGATT TGATAAACAG ATAAATATTT GCNCTGAGTA GGCTGTTTAT  
AATATAACAT TTNCTTATCT ATACAGAATG AAAGCCAAA AGITAACITG ATAGAGATGT GCAGAACAAC ATTAAATATT  
ATGGCTCAAA AGCAGGG

SEQ ID NO:2187: (Length of Sequence = 329 Nucleotides)

GCATTTNICA GCACAGATAG AGCCCTGTCC CTCCACCTAG TGCCCACTCC ATGACTGTTA ATAATAACAA TAATAATAAA  
ACTACTGGCC AAGCACGGTG GTCATGCCT GTAATCCCAT CACTTTGGGA GGTGAGGTG GGCAGATCAC CTGGCCCAAC  
GCCACGCGCT CTAGCTCCGG GCTCCCTGAG GTCCCCAGTG CCTTNNCCGG TCCCACGGCT CCCACGNTGC CACCTGTCC  
TGACTGCGCA CCTGGTCTTG TGGGCAGACT GCTGATCGAG TTCACCTCAC CCATGCCCTT GGAGGCGGGT GCAGAGGGAG  
AAGCCAGGC

SEQ ID NO:2188: (Length of Sequence = 335 Nucleotides)

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GGCCCCAGCT CCTCTTCCTG CCTCININAT GGCTTGGGCT GGAGTGGGCT CTCTGGACCT GACCGGGGGT CAGACTGTGG  
 GTCCCTGCGT CTCCTGCCCA CTCINACCGG GCTTCCTCCC TCCACGCTTA GGGTCTGTCC CGGGTACTCA GTCAGCCCAG  
 TGGGATCTTA CCCACTTCCC TGCAAGGTGC ACCTGCCCCA GGCTCAGGCT GCCCAGCGGC TCTTCCTGGA CAGTAAGAGC  
 AGGGCTGGGC GCCTCTTTCC TGGCCCCGAA GCGCAGGGG CCCCTCCTCC AGAGCCTNGG CGCAAGGAAC ACAAGGCTGC  
 CGCTGCTCTT CCAGG

SEQ ID NO:2189: (Length of Sequence = 366 Nucleotides)

AACTGGTGGA TCAGATCGAN TTCTACTTTT CTNATGAAA CCTGGAGAAG GACGCCTTTT TGCTAAAACA CGTGAGGAGG  
 AACAAAGCTGG GATATGTGAG CNITAAGCTA CTCACATCCT TCAAAAAGGT GAAACATCTT ACACGGGACT GGAGAACCAC  
 AGCAGATGCT TTGAAGTATT CAGTGGTCCT TGAGTTGAAT GAGGACCACC GGAAGGTGAG GGAGGACCAC CCCCCTCCCA  
 CTGTTCCCCA ACGAGAACCT CCCAGCAAG ATGCTCCTGG TCTATGATCT CTACTTGCTT CCTAAGCTGT GGGCTCTGGC  
 CACCCCCAG AAGGAATGGA AGGGTGCAAG AGAAGGTGAT GGAACA

SEQ ID NO:2190: (Length of Sequence = 333 Nucleotides)

CTGCGATCCA GCCTAGGCAA CAGAGTTGAG ACCCTATCTC AAAACAAACA AAACAGCCAG GCACGGTGGC TCATGCCTGT  
 AATCCCAGCA CTTTGGGAGG TCGAGGTGGG GGGATCACCT GAGGTCCGGA GTTCGAGACC AGACTGACCA ACATGGAGAA  
 AGCCCATCTC TACTAAAAAT ACAATATTAG GGGCGTGGT GGTGCATGCC TGTAATCCA GCTATTGGG AGGCTGAGGC  
 AGGAGAATCG CTTGAACCTG GGAGGCGGAG GTTGCAGTGA GCCATGATTG AGCCATTGCA CTACAGCCTG GGCAAGAGCA  
 AACTCCGTC TTC

SEQ ID NO:2191: (Length of Sequence = 284 Nucleotides)

AAGTTTATAA AAGTTTGATT ACTGGAAAAG TTGATCTTAA TTCAGAAATT TCAGGCCAAA TGAAACAGCC CCTTCAAGCA  
 AACATGCCTT CAATCTCTCG AGGCAGGACA ATGATTCAAT TTCCAGNGT TCGAAATAGC TCCTCAAGTA CAAGTCCTGT  
 TTCTAAAAAA GGCCACCCC TTAAGACTCC AGCCTCCAAA AGCCCTAGTG AAGGTCAAAC AGCCACCANT TCTCCTAGAG  
 GAGCCAAGCC ATCTGTGAAA TCAGAATTAA GCCCTGTTGC CAGG

SEQ ID NO:2192: (Length of Sequence = 260 Nucleotides)

ATGACGACGG CTACCTCGAG GTCATTGGCT TCACCATGAC GINGTTGGCC GCGCTGCAGG TGGGCGGACA CGGCGAGCGG  
 CTGACGCACT GTCGCGAGGT GGTGCTCACC ACATCCAAGG CCATCCGGT GCAGGTGGAT GGCGAGCCCT GCAAGCTTTC  
 AGCCTCACGC ATCCGCATCG CCTGCGCAA CCAGGNCACC ATGGTGACAG AGGCCAAGNG GCGGAGCGCC NTCCCCCTTG  
 CACAGCGACC AGCAGCCGGT

SEQ ID NO:2193: (Length of Sequence = 247 Nucleotides)

GGTCTCAGCA CTCGCTGGGT GACCCGCGGG AGCAGGCAA GGAGGGCTCC CAAGTCCGTT CTGCAGCACT GGGGCGAGGA  
 ACAGACCCAG GNTCCTGGGA ATCTCTTCT GCTAGCTTT GCCTGCCTGC CAGAGCAGGG CCTGCGGTTT GGGTNCCTGN  
 ACCNTCCGGG GGCGGGGAA GGGCAAGGNA GGCGGATCTC TGAAGTCCG CCCAACTTCG CTNCTGATCC CCCAAGGTCA  
 GAGAGGG

SEQ ID NO:2194: (Length of Sequence = 399 Nucleotides)

CCTCCATCTC CCGGGTTCAA GCGATTCTCG TACCTCAGCC TCACAAGTAG CTGGGATTAT AGGTGTCCGC CACCACACCT  
 AGCTAATTTT TGCAATGTTA GCAGAGATGA GGTTCGCCA GGTTGGCCAG GCTGGTCTTG AACTCCTGAC CTCAAGTGAT  
 CCACCCACCT TTGTTGGCCT CCCAAAGTGC TGGAATTACA GGCAACATGT AGCCTTTGAG TCTAGCTTCT TCCACTAGCC

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TAATTCATTT GAGATTCAC TCGATTCTAC TTGAGATTCA TCCACATTGT TGAATGCACA TTCTTTTITA TTGTTCGT  
AGCATTCTGT TGTGCAGCTG TGCCCCAGTT TGTTTANCTA TTCACTCTCA GTTGTTCCTA GTTTTAATGA CAACTTCAG

SEQ ID NO:2195: (Length of Sequence = 172 Nucleotides)

TCAAAGTCAG CTCTTGACC TGCAGGCTT CAATTTGTGG CTGACAGTTT TAACTCAGAA AATCCCTGAC TTGATTGGCT  
ACATAAATNA TATGINATAT AGCCATTAG ATCATGGTTT TGGAAAGTAT TTTAATGATA CAGGAATGTG CTCTGAAATA  
ATAAGTGGGA CT

SEQ ID NO:2196: (Length of Sequence = 398 Nucleotides)

GCAAAAAAAA AAATTATTAT CTCCACTTTA CCAGTGCTGA CACTTCACCA ATGTAGGGCT CTCAGTGA CTAGCCAGGGT  
CATGCACAGC CTGTTTCAGC AGCTACCTTG GACTTGAACC CAGCTCGGTC TGTCTGACTC AATGCCTATA GTCTTAACCT  
TTCCAGCAGC TGCTTCTTTG TCAAACAGT CCTCCCGCAG GTTTTCACAG CCCAGCCCCT TACTCAACAA GTATTTATTG  
ACAGGCCTCA GGAACACTAG GCAAGTAGGA TAGCAATGAA CAAGATGCTG ACCTTGACCT TGACCCTGCA TCCATAGTAT  
GAGCATTTTA ACTGGGGGAG GGTTTGCAA GTTCTCTTAA ACAGTCTACT ACATGCTCTG TAAGCATTTT CTTATGGG

SEQ ID NO:2197: (Length of Sequence = 313 Nucleotides)

GTCCCTTG TG CATGAGTGC ATCCCCGCTG GTGACTAAGC TCGCAGCAAG CGGCTACCCC CCGATCTGCA AAAGGGCCTC  
TCCCTTTG TG TTCTATACAT TGTAATCTT CCGTCTGAA GAACGCCAG CCTGCCAGA CAAAGCCCCG CCTTNCCTCA  
AGCAGAGGGG CTGCTGTGT CTCCAGAAAG GGGACATCG GGGGGAGGGG GGCTCAGAAA GGAGAAGGGG TGTGATCTCC  
GGTCCCTTCC CCCATCATCC TTCTTAGAC TGATGCTTG ACTGAATCAT CACTAGCTAT GGGCATTAA AGG

SEQ ID NO:2198: (Length of Sequence = 360 Nucleotides)

GGTCTCACTA TGTGCCCCAG GCTGGTCTCA AACTCCTGTT CTCAAGCGAT CCTCCTGCCT CGNCTACCA AGGTGCTGAG  
GTTACAGGCG TGAGCACTGC ACCTGGCTAG GAACTNAGT TTTTTCAGTG GTAGAGGCTC CTAGCCAGTG GCCAAGGGAA  
AGAGAGAGTT CTGGGTTTCA GGGCTGGCAG GAAGTCAGCA AGACACCAGG GACTCGGCTC CACTGGCTGG ATCTCAGGGA  
AGAGCAACTG CCACAGTGG GACCTGGAAC ACAAGGGAA ACTGAGGCAG CAGCTGCACC ACAGTTTACA AGTAGAAGA  
CCATGCTTGA GGACAACAGA AGTTTCACTA AGGATGCAG

SEQ ID NO:2199: (Length of Sequence = 374 Nucleotides)

TTTGGGTAG TACCCTTGCC CTCTTCATGG CCACTTCAAA GTGAAGCCAG CAAAGTGATA ATACTTTATC ATTTAGTATT  
ATCATAAAGT ATTAATACTT TGTATAAAG TCCTCCTTGA GCCCAGGGAC CATGGAAGTC AGCTAGAAGA GCCCTGAGCA  
AGGAGCAAGG ACTTGGGCTT CTCCACGCTT TGCTCCTGGC TTGTTTGACC TTGACTCAIT CCCCATATGT CTTTGAGGAG  
GCTCACAAAA TACTAAAGCT GGGAGGAAAC TTGGAGATCT ATAGGTCAAA CCTCCCAIT GGGCTGATGA GAAAATACAC  
GCAGGCTTAG CATGGTGCCT GCCACCATGG TGGGATCCAG TATGTTTITA TAAA

SEQ ID NO:2200: (Length of Sequence = 416 Nucleotides)

CTACTAAAAA TACAAAAATT AGCCAGGCGT GGTGGTGGGC ACCTGAAATC CCTACTCAGG AGGCTGAGGC AGAGAATCGC  
TTGAACCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCGT GCCACTGCAC TTCAGCCTGG GTGACAGAGC GAGACTCCAT  
CTCAAAACAA AACAAGCAA CAAACAACAA CAACAAAAA TACCTCTTGA CTTCTAAAGA CGCAAAAGTG GCCAAAAGTG  
CAATACAGTA TTGTGTTTAT TTACATCTAT TTTAAATGCA TGTGTATCTG TAAATNCAA GTGATTCTGT ACTCATTGTC



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TCCTCAGTCT ATAGCATTAT TAACTTTCTA GGAGCAGCAG TGGAGTAGAG TGGTACTGAA TTGGTCACAG ACTTCATCCG  
ATTATCAGGA TCCTGG

SEQ ID NO:2201: (Length of Sequence = 315 Nucleotides)

GAAACCAATA TAAATTTCAA AATAAACAG CATAACAGC AATTGCAATT TATAGAAAA ATAAAAATGT AGAAACATCA  
CCTCCTCTCC CGACCCAG TACTGAAATT ATACTTCTC AGACATACTG CCCCATCACT GGAAGGGTG CGGACAGATT  
GGGTACATTT ATAGANTATT AAATAATTAA GTAACAGAGG CACCGTTTTT GCATGTATGG TCCCAAAGAC TTTTCAACTT  
NTTTTTCAAC ATTACAGTTG TTAAGAATGG AAATTGAAGG AATTGTACAT ATTTTCACTG GCAGTTTCTT ACAGA

SEQ ID NO:2202: (Length of Sequence = 328 Nucleotides)

GCCTGTCTAC TCAGCCTGGA GTGCAGTGGT GTGATCTCGG CTCCTGCAA CCTCTGTGTC GCAGGTTCAA GCAATTCICA  
TGCCTCAGGC TCCTGAGTAG CTGGGATTAC AAGCATGCGC CACCATGCCC AGCTAATTTT TGTATTTTGA GTAGATACAG  
GGTTTCGCTT TCCTGACCTC AAGCTATCCA CTGCTCTGG TCTCTCTCAG TTCTGGGATT ACAGGTATGA GCCACCATGC  
CTGGCCGGAA TATATATATT TTTTACCACT CTATTTCAG TGCTAGACT AAAACCCAGC ACATGGTACA CGTCATACAT  
AAGGAAGG

SEQ ID NO:2203: (Length of Sequence = 268 Nucleotides)

ATTTTGTCT CGTCGCTCAT GCCACCACTG GGACNACGG GGTTCGGG AGTGGTTTTT CTGGCTTGTT TCAGCCTTTT  
CAGGCTCTCT TCATCTTCT TCACAGAGTT TAATACATCT GACACGGTTT CATAGTACTT ATGAGTGCIT TCACTGAGAG  
TGCCCTCTAG CCACGTCTGA ATTATGCTT GTTTGAGCTT ATCCTTGTTT CCGCTCTGAA GCTGGAATAA GGGCTTCANA  
GCACTGTCCA CATAGGAGGA AGCTTTGG

SEQ ID NO:2204: (Length of Sequence = 353 Nucleotides)

GTAAATCINA GGTCAAGGAT GTCCCATGAT GGATGATGAC TGANATGGAC GGAAGTTTGG TTTGAAGCGG TGGCATTTGGT  
GCAGGCTGGC AGAGGGGGCA GTTCTGGATA GAGTGTCTG ATGAATGGGG ATACTCATGG GAGGTGATGC AGATGAGGAT  
TCINTGCTTC TNAAGGAGGA GCCAGGCATT TAGAATGGCA CTGGAGAGCA AGGACTGACT GANCCCCCTC ACTGTGTCCC  
CAAGAGGCCA GGAAGGGAAG ATTGGAGGAG ACAAAGTTGA AGTGAGTTTT CCAGGGAACG AGTCAGTTAA GAGATGGTAG  
GATCTTAAGG GAAGATGGCT AAGATCTTAA GGG

SEQ ID NO:2205: (Length of Sequence = 265 Nucleotides)

GTTCACCAT GTTGGCCAGG CTGGTCTCAA ATTTCTNACC TCAGGTGATC CACCCCTCCT CAGCCTCCA AAGTGTGGG  
ACTACAGGCG TGAGTCACTG CGCCAGCCG TGGTTTTTTT TTTTATAGAA CAGTGTTTTG CCATGCTGCC CAGGCTGGTC  
TCAAATCCAT AGGTTCAGT GATCTCCCCA CCTCAGCCTC CCAAAGTGTC GGGACCACAG GCATGAGCCA CCATGCTTGG  
CCAGAAAGAA GTTGTTAACA AAATG

SEQ ID NO:2206: (Length of Sequence = 340 Nucleotides)

GCAAAGCTTA TTTTTTCAGT TGTGGGCTCT AGTTTGGTTG GGAACTAATT TCCTTAGACC TGGGTACCCC CTCGGGCTCC  
CTTAATCTCC CGCCATATGT TCTCCAGAAT CAGGCATGG TGTCTGCCC TGGTGGACT CAGCCGGTT GCTTTGCACA  
GACTCTGGGC CAGGGCAGGA TGTGGGTGT TGGCGGGTGT TCGCGGGTGT TATCTGTGG CGCTCAGTAT GGTGCATAGT  
GTAGACACGT GCCCTAGGTG GTGTTTAATT GATCTGGGTA AGACTCAGNC AAGGCAGGC ACAGTGGCTC ACGTCTATAA  
TCCCAGCACT TTGGGAGGCT

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SEQ ID NO:2207: (Length of Sequence = 348 Nucleotides)

GTGTTTGTTC CTCTTCCAC CATAATTGTA AGCTTCCTAA GGCCTCCCCA GCCCTGTGGA ATTGTGGATC AATTAAACCT  
 CTGTCCITTA TAAATAACCC AGTCTGAGGC AGTTCCTTAT AGCAGCGTGA GAATGGACTA ATACACCTCC CTCTTTGAGT  
 CTGGAAGAAT ATGTGAAGGG AGATTGCTAA GGAATTATTT ACAGAATGGT TCTTAAAGTG CTTGGGCAAG AACTATGTAT  
 TTNTGGAGGC TGGTAGTGTT TCAGTGAATC TGAAAACCTT TGTGACATGT GAGAAAGGTA TGCTGTCTCT GAAAGCTAAG  
 TGTATTATGA AGGATCTATA AAGGGCCA

SEQ ID NO:2208: (Length of Sequence = 154 Nucleotides)

GAATCTGCT GTGCACATTG CTTGAGATGG CTAATTATAT CTTTGGACTG TTTGTACAAC CATTGACAAA TATACTTACT  
 TTCATTCTG CTAATGCAAC TGAAAAGAGC ATTCTGTAAA TTGAAGAAAA ACAAATAAAC AGNAATTAAC AACC

SEQ ID NO:2209: (Length of Sequence = 352 Nucleotides)

GAGGTTGAGA ATCTCCATC CAGCATCTTC CCTGGTCACA TGGTCCCAAC CTTTTGCTCC ACCCCCTTCT CTGTTCCCCC  
 CGCAGTCCAT GCTCCAGCCA TCCTGACTCT GTCCCTGGAT TTCTGGCTTA CTGACACCTG AGCCTGTGCA CAGGNCCTCC  
 CTTCTGTATA GAGCACGCTT CCCATCTTGT GGAATTGCTT CCCATCTTGT GGAATCGGAG GGTTCGAGC AGCCGTTGAG  
 GTGANGCTCC TATGACACCT CCNCCGTGAA GCTTNCCTCA CTTTTCCATT ACCAGTGAGG CCTGCCACAG CTTGATTGT  
 ACTCTGATCC TGGCACGCAT GGAAGCCATC TT

SEQ ID NO:2210: (Length of Sequence = 338 Nucleotides)

GTCTTTCCAT CAAGAGTCAA TGTATATGCA AATATAGACT TAAGAACATA AGCATCTGG TTTAATGTTG TTGTGAGCCC  
 TGTGGAAATA AAATTAACT CAGTGAATGT TTACAAATCA ATACATAGTA ATCCTATATA TGAAAGCTAA GATGTATAAG  
 ATGTTTATAA ATTINCTATT AGAAAATACT GCTTTCTTAA AGGTGATTTT AAAAAGCTAG CTGATATCTG ATGGCTCAAG  
 CATCCAGAAA ATGTATGCAA TGATAAGNCA TTGACTAGGA TGAACAGAAA AGGGATACAG GAAAAGTCCG AACACATGAA  
 ATTCTAAATT AACCAAGA

SEQ ID NO:2211: (Length of Sequence = 353 Nucleotides)

GTCTCTGGAG TACCCTCTTC CCCCACCCCC AGACCTGCTT TCAGAGCAAA ACTCAAGTCC CTCTTCCTCC GTGAAGCTTC  
 TCCCTCAGCT GAGCAGTGAT CACTTACTCA CTCTTAACCC CAATCGCTG ACTGGGTGGG GACAGCACGT CCAGCCTTCC  
 CACCTCTCCT GCAGGCTTCT AGACGGAGTT TCAAAAAGTG ATGAGCCTCG ATCCAGGGCT TGAAAGAAGC CAGGGTGTA  
 TCTTGTTCAT GCATGCNTCC CCAGAGNCTC GCCCAGTGCC TGGNACATAG TAGGCACTCA ATAAATGCTG AATGGGTGAA  
 TAGTTGAATG ATAGGTGCTC AATAAATGAA TGA

SEQ ID NO:2212: (Length of Sequence = 293 Nucleotides)

GAGAAAGGAG GCAATCTCAG TCTCGTCTC CAAAAGGGA TACTACTAGG GAAAGCAGAA GATCTGAATC ACTGTCCCCA  
 AGAAGAGAAA CTTCTAGAGA GAACAAAAGA TCTCAGCCAA GAGTGAAAGA TTCTTCCCCA GGAGAAAAAT CCAGGTCCCCA  
 GAGCAGAGAA CGAGAAAGTG ATAGAGATGG GCAGAGGAGA GAGAGAGAAA GGAGANCCAG AAAGTGGTCT AGGTCCAGAT  
 CTCATTCTAG GTCCCCCTCA AGATGTAGAC CAAAAGTAA GAGTTCATCA TTT

SEQ ID NO:2213: (Length of Sequence = 423 Nucleotides)

NATTAACACC ACAGTGATAA ACAACTTTAA GCTTATGTTT CTTTATAGAT CACTGGCTCA CACATAATTC AAAACCCACA  
 CAGAAGCTAA GAGTCTTTAC ATTAAATATA TTCTTCCTAA AAATCCTTAC TGTATGCATC TGTCCTCAAG CAGTAAATTT  
 TGATTATGCA CCATTTTATA ATTAATATGT CACATTTACA TAGCAAAATA ATGAAGGCAC AGCTAATACA AGCAAACTTA

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AACCCCTTCT ACTTCTGAGC TGGGGGTAGG GGCACACACT TGGGATTGGT TCCTCAAGTA TATATTTTTN CCAAACATTA  
GCTTCAGTGA AGAGTTCTGG ATGATTTTCA CAGCTACACC CCTAAAAGCT ACATGGACAG AAAGACGTCA CAAGGCGCAA  
GGTACATAAC GGTGGGTACA TAT

SEQ ID NO:2214: (Length of Sequence = 259 Nucleotides)

GTCATGGAGA TCCACAGCAA GTACTNGCGC TGCCTGCAGG ANCAACCTCC ACAGCGGGGC GTTCTCTGAT CGAGGCTCAG  
ACTTTCGAGA ACGAAGAAGC CGAGACGGTC ACCGCCATGG CCTCGCTNTC CGTGGGCGTN AAGCCCGCCG AAAAGAGACC  
AGATGAGGAG CCCATGGAAG AGGAGCCGCC CTINTAGCAC TNCCTCGAAG NTGCTGTTCT CTGTCTGTG TGCTCTGTG  
TTTAAGCTCA GCCAAGAAA

SEQ ID NO:2215: (Length of Sequence = 378 Nucleotides)

CACACATCCT CACCCACAG AAACCTGCTGG ACACACTGAA GAACTGAAT AAAACAGATG AAGAAATAAG CAGTTAAAAA  
AATAAGTOGC CCTTCCAAAA CACGNCCCCA TCCACAGCG CTCCGAGCT TCCCACCACC GCCCGCCTCA GTTCTTTTGC  
GTCTGTTGCC TCCCAGCCC TGACGCCCCT GGCTGGCACT GTTGCCGCTG CATCTCTGTG TTCAGTGATG CCTCTTCTT  
GTTTGAANCA AAAGAAATA ATGCATTGTG TTTTTTAAA AAGAGGTATC TTAATACATN GTATCCTAAA AAGAGGAGCT  
CATGTGGCAA TTGGTGACA GCAGGAGGAA ATTTCTTGGG ACTTNTTTAG GNTGAATT

SEQ ID NO:2216: (Length of Sequence = 428 Nucleotides)

GAACCCACAC TGGGGAGAAA CCATATGAAT GTAAGGAATG TGGGAAAGCC TTCAATTATT CCAACTCATT TCAGATACAT  
GGAAGAATC ACACTGGAGA GAAACCCTAT GTATGTAAGG AATGTGGGAA AGCCTTCACT CAGTACTCGG GCCTTAGTAT  
GCATGTACGA TCTACAGTG GAGACAAGCC CTATGAATGT AAGGAATGTG GGAAATCCTT CCTTACATCC TCACGCCCTTA  
TTCAACATAT AAGAACTCAC ACTGGAGAGA AGCCTTTTGT ATGTGTTGAA TGTGGGAAAG CCTTTCAGT TTCCTCAAAT  
CTTAGTGGGC ATTTNAGGNA CTCACACTGN AGGAGGAAGG CCTCTGAAGT NTNAGATATG TGGGGNAAGT ATTTTGGGNG  
ATCCCCCAT GTCTTTAATA ATCCCCAT

SEQ ID NO:2217: (Length of Sequence = 408 Nucleotides)

GTCATCAGAG TTCATGTGA ACACCTGAA TGCCGGCTCG GGGGCTTGT CTGTACCAT TGATGGCCCC TCCAAGGTGC  
AGCTGGACTG TCGGGAGTNT CCTGAGGGCC ATGTGGTCAC TTATACTCCC ATGGCCCCTG GCAACTACCT CATTGCCATC  
AAGTACGGTG GCCCCAGCA CATCGTGGSC AGCCCCTICA AGGCCAAGGT CACTGGTCCG AGGCTTTTCC GGAGGNCACA  
GCTTINACGN NACATCCAG GTTCTTTGTG GGAGACTNIN TACCAAGTCC TTCCTTAAAG CCGGGGGCTT TCAGGTTACA  
AGNTTCCATT CCCCAGGTT TTTCTCTCAA AATNNCCAGC AAAAGGTGGG TTGACTNGNG GGCCCCINGG GNTTTTCCCA  
GGGCTTTC

SEQ ID NO:2218: (Length of Sequence = 316 Nucleotides)

TTTACAGAAT ATAGCTTTAT TTATAGAATC TTACAAATAA AACATTTACA GTCCACATAA GTTAATTINC TTTTCTAATT  
TCTCTCATA CACCTGAGTT ATTTAAAAA ATACTGTGAT GGAAGTGCAG AACTGTAAAG GGAAATAAGA ACAATAAAAT  
CCTAACCTCT CTGCAAAAA TCAGACAACCT TTGTTTTAAA GTAGATGCCC AGCATATTGC CATCTCTTTG GAAGAGGACT  
TACTATACTC AGCTCTTACG NTACCCAAAC AGAGAAGCCT TCTTTTTAAA ACCCAAGGTT AAGGGCCCAG TGAAGG

SEQ ID NO:2219: (Length of Sequence = 319 Nucleotides)

GGCTTCCTGT CCCACAACCT TCTACGGTG GCGCCTGGAC ACAGCAGCCA CCACAGTCCA GGCTGCAGG GCAGGGTGTG  
ACCCTGCCCG GGCAGCCACC CCTCCCTGAG AAGAAGCGGG CCTCGGAGGG GGATCGTTCT TTGGGCTCAG TCTCTCCCTC

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CTCCAGTGGC TTCTCCAGCC CGCACAGCGG GGAGCACCAT CAGTATCCCC TTCCCAAATN TCCTTCCCGA CTTTTCOAAG  
GCTTCAGAAG CGGCCTCACC TCTNGCCAGA TAGTCCAGGT GATAAACTTT GTGATGTGA AATTTTGTTT AAGACACTT

SEQ ID NO:2220: (Length of Sequence = 343 Nucleotides)

CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA  
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC  
CAGCGTCCCC TCCAGTCTGC ACGGGGCACT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC  
CCTCTATCCC TCCCAGCACC TACTACATCG NCTTNCACAT CCCTGATTCC TGTGTGTATG GGAAACTNNT NCCAGAGATG  
GAGGTTCTCT CGGAGTATCT CGG

SEQ ID NO:2221: (Length of Sequence = 373 Nucleotides)

CTCTGTCTCC CAGCCCGGAG TGCAGTAGCG CAATCTTAGC TCACTGCACT TTTGACCTCC CAGGCTCAAA TAATCCTCCC  
GCCTCAGCCT CCTAAGTAGC CGAGACCACA GCTGTGCGCC ACGACATCTA GCCAATTATT TGTTTTGTGT AGAGATGAGG  
TCTCACTGTG TTGCTCAGGC TGGGTAGGTG TCTAACTCCT AGGCTCAAGT GATCCTCCCA CCCCAGNCTC CCAAAGTGCT  
GGGACTACAG GCGTGAGTCA CCGCGCTGG CTTTGTTTAA GGCATTCTTT TTCCGCAGCA TCTGTTACCA GCAGCCTGAA  
GNCATTCTTA TAAACAATTA TCANGGAAGA CACATGGGNC AGAGACCCTA AAT

SEQ ID NO:2222: (Length of Sequence = 197 Nucleotides)

GTCTCTGTA ATTCCCCAA ACCGGTCTTT GAGGATGTGA AACCAACTTA TTGGGCTCAA TCCCATTGG TCACAGGATA  
CTGTACGTAT CTNCCTTTCC AGAGATTGTA TATCACCAG ACACCGCCAG CATACTAAA CGTGTACCA GGTGTGCCCC  
AGTACACCAG CATATATACA CCCTGGCCA GCGTTTC

SEQ ID NO:2223: (Length of Sequence = 280 Nucleotides)

TTTTTTTTTT GCATTTTITAG TAGAGACGGG GTTTCAGTGT GTTAGCCAGG ATGGTCTCAA TCTCTGACC TCGTGATCCA  
CCTGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGCGC CCGGCCAACT TTTTGCAATG TTTCTTTTAA  
ATTTCTCTAC TTTTAATTGT ACTTCTAATA CAGACACTTC TGAAATCAGT TTTCACATTG CTGCAGCCTT ACCAATTGT  
AGANACTGTT TATGTGATGT TTTGATTCTT CATTTATATA

SEQ ID NO:2224: (Length of Sequence = 388 Nucleotides)

GATTGCAGGC ATGAACCACT GCGCCAGTC GAGTGGTAAT ATTTTGAAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA  
GAGGTTAAAA TACTGAGTAG ACCATGCTGT AACAGATGT GCTGTTATTC GGGCTTTGAT ATTCCATTTA TAAAGCACAG  
GCAGAGCTCA GAGTAGATTT AATGTAACTC TGAAGGGCAC TAGGATTTTN AGAATGGTAA ATAAGCATTG GCTTCAACTT  
AAATTCAAAT CTGCATTGGC TTGTAATAAG AGACTAGCTT GTTACTGAAG CTTTNAAGCC AGTTGTTTTT TCCTATCTAG  
CTAGGAAAGT CCTAGATGGT ATCTACTTCC AATAAAAGGC TGTCTGGCC AGGCGCGTG GCTCACGC

SEQ ID NO:2225: (Length of Sequence = 420 Nucleotides)

GGTCGAGGAG CTTGGGCCGG GCGGGCGGG GACTACTCCG GAGTCAGGAG GCAGCAGNGG CGGAGGACGA GGATCTCTGG  
CAGTCAGCGC CGCTCGGACG CCGCCGSCAC CATGGGCTGC TGACCGGAC GCTGCTCGCT CATCTGCCCTC TGCGCGCTGC  
AGTTGGTCTC AGCATTAGAG AGGCAGATCT TTGACTTCCT TGGTTTCCAG TGGGCGCCTA TTCTTGAAA TTTTCTACAC  
ATAATAGTTG TCATATTGGG TTTGTTTGGG ACCATTCACT ACAGACCTCG ATACATAATG GTGGACACCG ATCTAATGAC  
ATTCAATATC TCTGTACATC GGTCAATGGT GAGAGAACAT GGGGCTGGT TGTTTCAAGA AGAGTGCTGC CTTCCCTCAA  
GCCCCATGGC ANNGATGGAC

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SEQ ID NO:2226: (Length of Sequence = 264 Nucleotides)

GTACCTGCTC CCTGCCGGCA CCTTTNTTGG TGGATATTTA GCTGCCCTCT ACAGTGGTTA TAACATTGAA CAGATCATGT  
 ACCTAGGCTC GGGTTTGTNC TGTGTCGGTG CCTTGGCTGG CCTCTCCACC CAGGGAACAG CACGTCTTGG CAATGCACTG  
 GGCATGATTG GGGTTGCTGG AGGACTGGCA GCCACCCTCG GAGTCTTAA ACCGGGCCCCA GAATTACTAG CTCAGATGTC  
 TGGAGCGATG GCTTTGGGTG GTAC

SEQ ID NO:2227: (Length of Sequence = 402 Nucleotides)

AGAGGATTGG GGCCTGGGG CAGGGGCGCT GGCACATTCC TCAGATTCTG GCATGTCATC CTGGAAGTAC TCAGCCTGGC  
 GGTACTGCCA CAGACGCAGG TTCCCGTCCC ACGAAGTCTG GACAATCTTC TCTTCAAAGG GGTGCCAACT GACGTCAACG  
 ACACAGGCCT TGTGGTTGGT CAGCTCTCTC ACAATGTGGC CACTTGAAG GTCTACACA ACCACTTTGC CAGTGGAGCA  
 GCCACTGTAG ATGAAGTCTG GGCCAGTCT ATGAATGGGG GAGAACCGGC AGCGGATGAG GGTGTGCAGC ACTCCGTGGC  
 CCCGGTAGGT CATCAAGGAG CTGTCCCTG GGAGCTTCAG TTTCGCCAG GCTTTTTTNG GGCATTTCT GCCACCGATA  
 GT

SEQ ID NO:2228: (Length of Sequence = 394 Nucleotides)

TTTAAAGTGG AAACAATGTT TTTAAGAGGT GATATAAAGA AATGCCCCCA CTGTAATCCC TACCATATGT TGATTCTATG  
 TGGTGGGAGG GAGGGGAGAA TGATTCTTT TTCTAGAATC AGAGAATTG GAAAGTATCA AGAAAGATAA TAACAGAAAG  
 CATGAAATAG AGTTGTGCTT TGAAGATGAA TTGGATGAAA TTNTATGTG AAGAGGAGTT TTCCAAAGTT GCAGACCCAG  
 GATTCCTGGC CAGAAGCATG AAAACGTTTC TTCTTACTG TTCTAGGAC CTAGGCAGCA TTTCTTCCAT GTCTGCAACA  
 ACATAAGAAA CAACAGCCCA AACAGCAGCA GCAACATTCA TCTGCTTTGG ATCCCATGGA CAGTCATGGT GTCT

SEQ ID NO:2229: (Length of Sequence = 342 Nucleotides)

TTTTTTTTAG GATGATTGAG TGTTCCTTA AAAATAAAAA CCCCACAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA  
 GTGTAACAGG TTAGCCATTA ACACAGAATA AAGAAGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGCCT  
 GGTCCGCCGA CGTCACAGT GATGGCCCTG CGTGGCTGGG ACACAGACAG GGAGCAGGCA TGGCACCTGC GCCACGCAGA  
 GCAGCAAGGC TGAGCATGAC CACTGGAAAT AAATAACAT GGTGCCGACA GCATCTTTGA ATTAGTAAGA CGTTAGCACA  
 AAACAAAAA GCACAACGAC TG

SEQ ID NO:2230: (Length of Sequence = 357 Nucleotides)

GTGGAATGCA GCCATCACAC AGTAGTTTCT GAGATTGCTT CCGTCTAGGT TTTATGGGAA GATATTTCTT TTTCTACCAT  
 AGGCTTCAAG GCGCTCTAAT ATCCGCTTGG AAATACTACA AAAACAGTGT TTCAAACTG CTCTATCAA AGGAAGGATC  
 CACACTGTGA GTTGAATTCA CACATCACAA AGAAATCTCT GAGAATTCTT CTGCTGGGT TTATAGGAAG AAATCCCGTT  
 TCCAACGAAG GCTCAAAGC GGTCCATATA TCCACTTGA GATTCTACAG AAACAATGTT TCCAACCTGC TCTATCAAGA  
 GGAATGTTGC ACTCGGTGAG TTGAATGCAC ACATCAC

SEQ ID NO:2231: (Length of Sequence = 304 Nucleotides)

AAGAGACGAG GTCTACTTT NINGGCCAGG TTGGTCTCAA ACCCTGGTC ACAACAATC CTCCAGCCTC ANCCTCCCAA  
 AGTGCTGGCA TTACAAGCAT GAGCCACCAT GCCAGCTTA AGGGGATAT TTTTATAGAG CATCTTGCCC TGGTTCTGGA  
 ATTCTCTGTA GATAATACAG TTAACAGATA TTCCCCTAAG TGATTAGAA CCTTCCATT TGAATGATTT TNCAGAAAAG  
 TTTACCTATG TAACCTCAGT GGTAGCACA ATGCCTGACA CATCTTTGNA GCTCAAATGT CTCT

SEQ ID NO:2232: (Length of Sequence = 354 Nucleotides)

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CCTGCCACTG AGGCAGGTGC GGCCCCAGGA CCATCACCAG GAATGCNAGG CCACCCTGGA CCAGAGGTAG GAGCCCAAGG  
 TCCGGCCCTT GCTCTTTGAT TGTGGGCAGC CTCCTGCCCT CTCCTGGTCT CAGTTGCCCC ATCTGCAGAG CGAGGAGGCC  
 CGGGCTGGTT GGTCTTGAAG GCCCTTTTCC ATGCCGACAT CATGTCACTC TAGGCCTGGG GTTCAGTTTC CTGTGGCTGG  
 TGATGCTGTG GTTAAGTTTG CTTGACCCCA GCAGCCCGAG GGAAGTGTCTG AGTCACAGCA CAGCCCTTAT TCGTGGCTG  
 CTGGTGTGTG GGGTCAATTC CAGCAGATGA ATGT

SEQ ID NO:2233: (Length of Sequence = 414 Nucleotides)

CCCAAAGCCC GCACGATGCA GGCCACTNCG ATTCCACCAA GATGGACTGT GTGTGGAGCA ACTGGAAAAG TCAGGCTATT  
 GACCTGTGTG ATTGGCGGGA CATCAAGCAG ACGGGCATCG TGTITGGGAG TTTCTGCTG CTGCTCTTCT CCTTGACCCA  
 GTTCAGCGTG GTGAGCGTCG TGGCTACCT GGCCCTGGCC GCACTCTCAG CCACCATCAG TTTCCGCATC TACAAGTCTG  
 TTTTACAAGC AGTGCAGAAA ACCGACGAAG GCCACCCCTT CAAGGCCTAC TTGGAGCTTG AGATCANCCT TTCTCAGGAG  
 CAGATTCAGA AGTACACGGA CTTCCTGCA GTTCTACGTG AACAGCACAC TTAAGGAAGT NAGGAGGCTC TTCCTGTGCC  
 AGGACCTGGT GGAT

SEQ ID NO:2234: (Length of Sequence = 394 Nucleotides)

ATAATCCGAG TGCTCCATCT TCAGTGCCAT CTGGACTUCC ACCAAGTGCA ACACCCTNCA NTGTGCCTTT TGGACCAGCA  
 CCAACAGGAA TGTATCCCTC CGTGCTCCC ACCGGACCAC CTCCAGGACC CCCAGCACCC TTTCTCCTT CCGGACCATC  
 ATGTCCCCCA NCTGGTGGTC CTTATCCAGC CCCAACTGTG CCGGGCCCTG GCCCCACAGG GCATATCCTA CACCAAATAT  
 GCCCTTTNCA GAGCTACCCA GACCATATGG TGCACCACA GATCCAGCTG CAGNTGNTCC TTTAGGTCCA TGGGGATCCA  
 TGTITITNIG ACCCTTGGGC GNCAGGAATN GGAGGGCAGT ATCCTACCCN GTAATATGGC NATATNCATN TNCA

SEQ ID NO:2235: (Length of Sequence = 376 Nucleotides)

CTGATATGAT GACAATAAAG GAGTATGCTG CTGCTGTTC GCTTTGCGTC CTCGCTACAA ACGCCTGGTG GACAACATAT  
 TCCCTGAAGA TCCAAAAGAT GGCCTTGTA AACTGATAT GGAGAAATTG ACATTTTATG CAGTATCTGC TCCAGAGAAA  
 CTGGATCGAA TTGGTTCTTA CTTGGCAGAA AGGTTGAGCA GGGATGTTGT CAGACATCGT TCTGGGTATG TTTGATTGC  
 TATGGAGGCA CTGGACCAAC TTCTCATGGC TTGCCATTCT CAAAGCATTG AGCCATTTGT AGAAAGCTTT CTTCATATGG  
 TGGCAAAGCT GCTGGAATCG GGGGAACCAA AGCTTCAAGT TCTTGAACA AATTCT

SEQ ID NO:2236: (Length of Sequence = 399 Nucleotides)

TGGCAAGAAC ACTGAAACCC AGCCAACTTC TCCTCAGCTA GGGACCAAAA CCTTTTGTG TGTAGTCCTT CCGAGGTTGG  
 AGACTCTTCT GCAGCCAAGG AAAAGGTCCG GGAGACATGC GGAGACTCCG AGGTGGAGGA GGAGTCCCCA GGAAAGCGCC  
 TGGACGCAGG TCTACCAAC GGCCTTGGGG GTGCGAGGAG CGAGCAGGAG CCGGGCGGCG GCCTNGGGAG GAAGGCCACA  
 CCCCAGCAGC GCTGTGCCTC CGAGTCCAGC ATCTCCTTCA GCAACAGCCC GCTCTGCGAC TCGAGCTTTA ATGCGCCCAA  
 ATNIGGGCGG GGGCAAACCG GCTCTTGTGC GACGGCACAC GCTTGGAGGA CCNCAGTNAG CTGATCTTCT GCATCGAGA

SEQ ID NO:2237: (Length of Sequence = 234 Nucleotides)

AAANTACTAA CATTTTTAAT ACAGTCTGAT CAGATCAATT CACATCACAA GGTCAACCGG GGCTTGCTCA CATGTGNCAC  
 AACTGAGGNA CACAATGTCC CTACCTGCCG GCTGTCCAC CTTCCTGGTT CCAACAGCA TTGAAACCCC CTACTTCCCT  
 GACCAGACTG GCATTTTTTA AAATTTTGCA TAAACTATT TCTCCATAG NCTTCAACA ATCAACTAGC CAAG

SEQ ID NO:2238: (Length of Sequence = 369 Nucleotides)

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ATTTAAGGCT GTACTTAACT AATTITGGGCT GAGGATGAAT ATATCAGCCA CAGCACATTA AAGAATGAGC CAAGGATTTG  
 TCATGGTGG TCACTTTTTA AAGTATTGA TTAGTGCAAC TGGAGAATGA AAAGTGATA TTGGTGACGC CAACCTCAGT  
 TTCTGAGCAC TCCTGCTCTG TGGTGAGAAT CAGACAAAAA TTATCGGGG TGAAAAAAA AAGGCATTAC CTGATTACAC  
 CCTTGCTCTT GCTAGCCCTC TTCCATTCTT TTCTCACACA GCATTITGCT CTGTAAATC CTCTCTCTGT CTCAGACCAT  
 TGCTTGCCCC TTCAAAGGT ATGGTTCAGG CTCCTTTCAA GACATTGG

SEQ ID NO:2239: (Length of Sequence = 399 Nucleotides)

TTAATATAAT ATTCAAGTCT AGCATTGCT ATTTACAACA AATAAATATT GCCCTCCCC AATCAGTAAA CAAACATTTT  
 TTTTTCTTT TTGCTTTTTA TACAAATATT CAATCACCCC ACCCCCACCC CAAATCCTCC TTCTCACTA ACCCCCGTCT  
 TGCATGGTCT CGTAAAGCCC AGGACGCAGT GGTGAATGGC ACTTGCACTG GCATGAGATT CAACATCGAT GGGACTCAGC  
 TGGGACTGTC CTCCTCACC GGGTGAGAG TCTGGTCCAT GAAGAGGGT TCTTCTCTG CTCCAGGGG AGGGCTGGG  
 TAAGCGGTGG GTGAGACTCC CTCCTCTCA GTTGGNCTG ATGATGGAAT CTMTNGTGCA GCCTGAGAAA GGCTAGAGT

SEQ ID NO:2240: (Length of Sequence = 388 Nucleotides)

TTTTCAGAAT TCATCTCTGA CTMTAATGGC TTAAGCAAGA ACATGGTTTC CGTGGCTCCC CCTGGACTGA ATGCTGGAGG  
 ATATATACTT CACAGTCTGA GGCCTGGTCC CAGGAAGTGC AATCTAACAG GATGGCAAGT GGTTTTGAAA CATATAGATT  
 TTCAGGATGG AAGTTTGATT CTTCAGATTG TGACTCATCC GTGGAAAATA AATGGTTTAG CACCTAAATC TGTATATTCC  
 CATCAGTGGC TTGGCTGACT CAGTTGTAAA TAGGGTACCC TCCATCTGTC TCCCACCCAT ATGCTCCACT GTCCCCAGGG  
 CCTCAGTGCC TGANCCCTAG GGGGATTGCA GTTGGCTGCT GGATTCATTT CCTGCAAGCA GGCCTGCA

SEQ ID NO:2241: (Length of Sequence = 377 Nucleotides)

CTCCATTTTG TCCTAGTTAC TTTAAGGTA TAAGCTGAAG TCATTGATTT GAGATGTTTC TNCCTTTCTA ATATAGGTGT  
 TTAATGGTAC ATATTCTCC CTAAGTACTG CTTIAGTGGC ATCTGCAAA TTCIGACATA CTGTGGTTCA TTTTAATTCA  
 TTACAAAATA CTCTTAATT TCCCTTTTGA TTTCTCTTT AATTCATGGG TTAGTTAGAA TTGTGTTATT TAATTTCNAA  
 GTACTTGGG ATTTATCTCT CTCTGTTATT CATGCTAAT TTAATCCCAG TGTTGCTGTA GAATATATTT NGATATCAAT  
 AAAGCTACTC CAGCTACCTT TGATTAATG TTATCACAGT ATATCTTTTT CTATCCT

SEQ ID NO:2242: (Length of Sequence = 381 Nucleotides)

CCCACATTAA CCAAAACAC ACACACATGA CAAACTCTAA GTCTCCAGAC AGACACCTC AAATAGGCAC TTGGTGTGTT  
 CAGCTGGGG CTGGAGAGAT CTGGGGCTTT GGCCTCCAA GGNAGGAGCT GCTGTCCCA GAGAGGAGAC AACAGCTTCT  
 GGAGGCTCTG GGGACTCATT GGATGGGTAC TGGCTAGGTA GATGGGAAGG GGGCTGTTT AAAGAAGACC CCCCACCC  
 ACTGCCCCATT TCACCACAAC AGTGACTTGC TGGAAGTTT GTGCCCTGCG GATTCTGAA TATAGTGGAC AGGCATTCT  
 AAAGAGCGCA TCACTGAAGG GGCAGAGGCT NGCCTTTAA TGTTGGCTTT GCATGTTTTG G

SEQ ID NO:2243: (Length of Sequence = 359 Nucleotides)

ACCATTTATT AAATCAGACT GTTATCTTA ACAGTTATGT AAGTTACATG TATGTTAAG TCAGAGTATT TCACATGGAA  
 AAGTTTTTAA CTCTATAGG CAAGCAAAAT CATATCACAC AATATATAAG TGGGAAGGG ATACTGCTAA ACATTCAAAT  
 AAGGCAAGTA TATAAACCA ATAAACAAT AATGAAAAA TTCAAGCATT CTTTAAGAG AATTCAACAC TACAAGCTAA  
 ATGTACTTTC TGAGTGTATT CGTATAATCA AGGCAGTGT TCTCCTTTTA AAACATCAGG AAATGGAATA AGGCTCATTA  
 GTAGATACAG CTGCCCTCAA GATTTCAATT TCAGTTTC

SEQ ID NO:2244: (Length of Sequence = 362 Nucleotides)

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ATATGTACTA CATTGGTGG AATACGCATG TACAATTCTT CAAAAATAGT AAAGAGCAAA ACAAACAAAA AATAGTAGAA  
GCACTGGAGA AATACACTAT GGCATAAACT AGTTACGGGT GGGATGTCAC ATGGACCATA TCTACACTCT GTGGCAACCT  
TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT  
CCTAAGCAIT TTATTTTAGC TCAAAATATA AAATATTCAT CAGTTAGCCA AGCTTTGGGA TGAGAGATCA TAGCCTCCTC  
TTGATAGGN GTTCTTGTT TTCTTGATT CATGTTTCAG AG

SEQ ID NO:2245: (Length of Sequence = 333 Nucleotides)

AAGGATCTGA GCGAGTTCAG TGTATTGTG GGCAACGGGG AGATTAGCT GCCAGTGGAG ATCAGTGGGG CCATCGAGGA  
GGAGTTCACCT GTGGCCCGAC TCTACATCAG CAAAATCAAA TCAGAAGTCA AGTCTGTGGT CAAGCGGTGC CGGCAGCTGG  
AGAACCTCCA GGTGGAGINT CACCGCAAGA TGAAGTINAC CGGGCGGGAG CTCTCATCCT NCCAGCTCCT CATCTCTCAG  
CATGAGGCCA AGATCCGCTC GCTTACGGAA TACATGCAGA GCGTGGAGCT AAAGAAGCGG CACCTGGAAG AGTCTATGA  
CTCCTTGAGC GAT

SEQ ID NO:2246: (Length of Sequence = 347 Nucleotides)

AAACTAGCTT TGGTGGGAAC TCCCTACCC CTGCTCCCCA CAGGAAGGCA TTAATCTATT TATGAGGGAT CTACCTGCTA  
TAACCCAAAC ACCCCACCAG CCCCCTCTC CCAACACCAC CACACTGGGG ATTAAATTTT AATGTGGGAT TTGGAGAGGA  
CAATATCCA AACCATAGCA GTCTTAAAGT ATTTAAATTA GAATTTAAAT TAAAATTTAA ATTACAGTAT TTAAATTAGA  
ATCATTTGTG GAGTTTCTAA AAGGTATGCA TTCCTAGGCC CCTCTCAAGT TAGATTTATG GACACTGATC CCCAGTCTGG  
AATTTTAAAA CAGCAAAATC TCATACT

SEQ ID NO:2247: (Length of Sequence = 357 Nucleotides)

CACAGGACAT GCTCCGTCAG CACAAGCACT CCCAAGTCAA TCTGAAAAGC AGGCAGCAGC ATTGCAGGGG ACAGGTCCTC  
CCCTGATCTG GGTGGTGGTC TTCTCCCACT TAAAGCACTA TATACAGGGG GAGGTCCCAG GCTGGACATC TTTACCAGGG  
GCTGGGAGAA AGCAGGCCGT GCTCTGTGGT CTCAGAGTCT TCCTGGGCGT CTTTGGGAACC TGACAGAACA TGACCTCAGT  
CCCAGCCAGC GAGTGGCAGA GAGGACTTTG TACTTGGCTG CAATAAAACA TGCCCTTCIT CGCAGAGACA CGAACAATCT  
CGTCTCTACC AGAGGCCTGT GAGACATCAG CTCAGGA

SEQ ID NO:2248: (Length of Sequence = 327 Nucleotides)

TTCTCTTTAT TAATGGCTAG AAAGTCAGGT TCACCCAAGG AAGTCACTGA GGGGCCACAG CATTTGAAGGG TATGGGGTTT  
GGAGAGATAG GAGCAGGACC CACCACTCAC GTCCAGAACC CAGGGGGCAC ACCTGGTCCA AGAGGTGGAG GCATTGGTCA  
CTGGAGTCAC GAGGGTCAGG ACAGGCACTG AGAGGCTGAG GGAGTNTCGG TCCGGAGGGA GGCAGTCAGG GGCTAGGGCT  
GGGAGTCGTA GCCAGTNTGC AGGGCCTGGG AGCCCCAGGG CTGATGCCCT GGGCTGGCGT AGTACTCCAC CACCTGCCGT  
GGCACCT

SEQ ID NO:2249: (Length of Sequence = 404 Nucleotides)

ATTTTTTAAT TAGGTTTGTT TTATTTAAGT TTAATGTAA TTCCATGCTG TGTTCAGTA AGAACAATAC AGATTCTGTA  
TCTGTGGCTC CAGTCAGATA TCCAGTAGTA CAAATTAGCT TCAAGTTACA CATACTGAAC AAAAGAGGTT GAGCGAGCGA  
AGGAGGGGAG GAGTGAGGGG AAGGAGGTAG GGGGAGGGG AAGGAGAAGA AACAAAAGNN TTGAACAGGC ATGCAGGCTT  
TTCCATACCA CCTTCAACGC TAACCTGCTT CAGTGGGAGA GTAAAGTAGG CAAGANTGAG CAGCCACGGG ATTGTTGAAC  
TGTTACCCAG CACCATGCTT TTCAGCAACA TTTTCAGCGG AGTTTGGGAA CATTTTTTTA CCAGCAAAAA CCATTACACC  
GAGT



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SEQ ID NO:2250: (Length of Sequence = 275 Nucleotides)

TGCCAAATAT ATATATCTGA ACATAGTGAA AAAGTAACAT TTAAAATCAG TCAAATTATT TTTAAAATTC CTTTGCTTAA  
 TAGCCATTAC TTACTCACCT TTGTTTTTGG TTTTINCCTT CAACTACTAG AGTACTGTAC TTTTGCTTTC ATTCCCTTCTA  
 TACATTCCTG CTTTCATCCTT AAATTGTTCA ACTCGATAGT GCTAATATTG GTAGATAATC TACGCTAGCT GCTGTTTCTT  
 GTACAGAAGT TGGTTGATAT CGCTGATTCA CTTTT

SEQ ID NO:2251: (Length of Sequence = 426 Nucleotides)

GGAATAAGGA GATGAGAGCA TGCTCTGCCA ACTGGCTGGG ACCTGAATGT GCTAGGCAAG TNCCACTACA TCAGCTCAAG  
 AACATAACA AAAATGTAAT TTAACAAACA GATGGTTTAA AAAATATCT GATAAAAT ACCIATCCCT CTCCTTGCT  
 GTGAAATAAT TTAATAAATT TATCTAGAT GTAAAAATA TAATACAAA AAGTTTGTTC AAAGACACCT GTGTCCTGTT  
 TGTTAAGTGT GCAGTCTGGG TCCCTTGGGG TGGAGGGAGC TGGCCAAGGA ATGGCATTGT GCAGAGGCAT ACCGGGAAGC  
 TCTCTGGATG CAACCCACC TCTACCGCTT GGCAGTCAAT GACCTTGGGC ATGATGTTTC TTCATTCTC TGAGGGCTAG  
 GGCTTTGATT CTGAACATGG GGGGCT

SEQ ID NO:2252: (Length of Sequence = 315 Nucleotides)

GAAAAGATAA ACAAATTA TAGACCATTG GTGAGATTAA CCAAGACAAC AGGAAAGAAG ATCTTAATAA GCTCAATTAG  
 CAATGAAATG NGAGCTACTA CAACTGATAC CACAGAAATA CAAAGATCA TTCAAGGCTA CTATGAACAC CTTACGTC  
 ACAAACTAGA AAACATAGAG GAGATGGATA AATTCCTGGA ATTTTAAGAN TAATACAATG GACTTTGGGG AATCAGGAGA  
 AAGGGTAAGA GTGGGGTGAG GGATAAAGA CTACACATTG CACACAGTGT AACTTCTTG GTGATGGGT GCGCC

SEQ ID NO:2253: (Length of Sequence = 335 Nucleotides)

AGATTTATTC TCAITACAA AGCGGTCAGC CCACGGGACC ATATACGACA GTTGACAGA GTCTAGAAA AACGCATCTN  
 TCTAAGGCA ACTCAGAAAG GTAAGGCAGG TGGACCCCT CCCCCACCC ACAACGCACA CAGAATGAAA CGGAGAAAAA  
 GAGAGAAGCC AGTGGCCGGG CTGACCCAAG AGTCCCGGCC CTATGGGGTC TCCCAAGCCC CAGGGCACAG GTGGATATGG  
 CCTTGAAGAG AGAGCCCTGC CAGGGCTNAG GCCAGGTCTC TACTGGCTG CAGGAATNGG TAAGGGGCTC AGGCCAAGG  
 GAACACTTCA GGGG

SEQ ID NO:2254: (Length of Sequence = 380 Nucleotides)

GGAAGGCTCT GGAGAGGTTT CTGAGGATT ACTTTGATGG CAATCTGAAG AGATACCTGA AGTCTGAACC TATCCAGAG  
 AGCAATGATG GGCCTGTGAA GGTAGTGGTA GCAGAGAATT TTGATAAATA ATATACAATA ATCAGATCCA CTTTCCACCA  
 CCTACACAAA AACATTTCA TACAGACTGC AGTACAGTGA TTTTITTTTA TGAATAAAA GGTCAAAATT GTTTCATTTT  
 CTCCTCTGCA GATTCTAAGT AAAAAATGAC AAAATATGCA TAGAGATGTT TGTAACCAA AAATAAATGT CTAGGGCCCC  
 GAACCATCTT GAATGGGACC CCTCCTCTCA GCCAAGGGCA TTCCAAAATT AACCTGCAAA

SEQ ID NO:2255: (Length of Sequence = 399 Nucleotides)

ATATAAAAAG TGTTTCTGTG ATCTINCAGA GCCCAGGAGT CAGTGTGGT GGTGGAGGG ACCTGCCCCC ACTGGTTTCAT  
 TTAACCTCTT GTCTCGGTGC CCTCAGAAC TCAGCCAGAA AGGCAAGGAG GAAATCAGAG CAGGAGCCTC ATACTCTTGG  
 TGATCTATTC ATCTGTGAC CTCAGGGGTC ACATATAAGG TCAGTGTTC TCGTCCCGC CGGATCTGCA CTGCCAACTG  
 GGATTTGGTT CGAACAGCTT CATAAACATC TTCAGCATTT TGTACCATCT GCTCCCAAT GGCCAAAATC ACATCACCAG  
 GNOGCAGACC CAGCCCGGTG TGCAGGGGAG CCCAGGATGA CTTTATGGGA TGAGTACANC ATGCTGAACA TCGGGNAAG

SEQ ID NO:2256: (Length of Sequence = 371 Nucleotides)

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TTTTTTTTTT TAACTGTAAA TGCTATTTTA TTTTAAACAT TTTTGTTTAC AAAAAAAAAA AAAATCAATG ATTGGTACCT  
TTTTTACACT CTCAGATTCC TGAATATGGA CAGATCTTCA AAGGGAGGAA GGAGTTCTCA TATGAAATTT AAGATAGACT  
GTCTGAAGG TTGTGGGGTG GGGTTTTTTG TTGTGTTTTA ATTCGCTTTT GTTTTTAAGN CACAATAAAG CTAAAATGTC  
AAGTCTCTGG GAGAGATCCC CTAAAGTTT CAGTCAAGGA GCATATCAGA GCACAGACAA GENGACCCCA GCGTGGTGCC  
CGCCGGCCCCG TCCCGGCTGC CCAGNGTAT TTGGTAGCGC ATGGGTTGAG A

SEQ ID NO:2257: (Length of Sequence = 372 Nucleotides)

AACTCTATGG CACTAATGTA TGATGGATTG ATTTCCAGAC TGTCGCCAC GGAAGCACTT CTTCATGGCC TCTGCCCTGG  
ACAGCAGCCT GTCTCCGGG CTCCCATGT TTTTACCAGC TTCTGCTGAG TTTCTACAAT CTTGAGCTCT GCTGAGAATT  
CTTTTCCTTG AAATTTCTTCT ACCTAAAGCC CCAGCCCCCA AAAGAGCATG TCTCAGGAAC TCATTATGCC CTGAGTCAAC  
AAGAACTTGT TGATAAATGG CTAAAAGTT TTTACAAGAA GTAACCTCCC TTGGTAAGGA GTAAATAATA GCTCTGGGAA  
TTTTCCAGAT AAACTATTT CATTCTCTG GTCAGTGGCC CCATGGGGAG AG

SEQ ID NO:2258: (Length of Sequence = 340 Nucleotides)

CTCAGCCTCC TGAGAACCTG GGATTGCAGC CTCCGAGAA CCTGGGATTG CAGGCACCTG CTGCCATGCC CAGCGAAGAT  
TTTGATTTTT TAGTGGAGAC GGGGTTTCAC CATGTTGGCC AGGCGGGTCT CAAACTCCTG ACCTCGTGAT CCACCCGCTT  
TGGCCCCCA AAGTGTGGG ATTACAGGGG TGAGACACCA CGCTCGGCTT TTATATATAT TTTNAGAGAG GGGGTCTCAT  
TTTNTGCCC AGGCTGGTCT TGAACCTCTG GGCTCAAGCA ATCTTCCCGC CTCAGNCTCT CAAAGTGCTG GGGATTACAG  
GCAATGAGCC NACCGTGNCC

SEQ ID NO:2259: (Length of Sequence = 394 Nucleotides)

CCCCCAGAT CCCACTGTTA GGAGAAGGCC TCTGCTAACA TTTTCTCTAT CTTGTTATCC TCTGGGAATG AGACCCACTA  
AAGGGCTAGA GTGTGCTCA GTGTGAATTC CTCTTTCTCG ACTCCATCTT CGCGGTAGCT GGGACCGCCG TTCAGTCGCC  
AATATGCAGC TCTTTGTCCG CGCCCAGGAG CTACACACCT TCGAGGTGAC CGGCCAGGAA ACGGTGCGCC AGATCAAGGC  
TCATGTAGCC TCACTGGAGG GCATTGCCCC GGAAGATCAA GTCGTGCTCC TGGCAGGCGC GNCCTGGGA GGATGAGGCC  
ACTCTNGGCC AGTNCGGGT GGAGGCCCTT ACTACCCTGG AAGTAGCAAG GCCGATGCT TTNAGGTAA AGTC

SEQ ID NO:2260: (Length of Sequence = 359 Nucleotides)

TTTTTTTTTG AGATCTGAGA TTCCTTTAAT CAGAAGCACG TGCGTCCAC AGTGTGCTCT TCAAGCCCCA AAGGGCACGC  
CTCTAGGACT GCNTCCTTAG AGCGAGGCTC GGGCTCTTGG TAAAAAGCA TTTGCTTGAT TTTATTTAAA CAATGGTGAA  
TCTTCAAGGT GCCAGTCTAC ATGCCCAACA GTCTCCAGG NTTCAGGNC ACAGTCACG TCACTCAGAG ACTGCCTCAT  
TTNGCAAGAG AGAAAAACAG TGACCACCAC AGAGGGCAGG GAGTGACAAA GCTTGTAGGC TAATGCTGCA AAAGCCGCTA  
GAAACTGGGG GCCACACACA AGNGCCANC AGGTGCGCC

SEQ ID NO:2261: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT GAGACAGAGT CTCGCTCTGT CGCCAGGTTG GAATGCAGTG GTGTGATCTC AGCTCACTGC AACCTCGCC  
TCCCGGTCC AAGCAATTC TCTGCCTCAG CCTCTGAGT TGCTGGGACC ACAGGCGCAC GCACCACGCC AGGCTAATTT  
TTGTATTTTT AGTAGAGACG GGGTGTACAC ATATTGGCCA GGCTGGTCTC TCGAAATCT TAAATCCAAA CATTTCTATT  
CTCTAGATC CCTTGCTCAG GCGAATCCTT TCATCTTCC CTATAGCTC ATCAGCATGT AAGTGTCTG ACATCTCTCT  
TCTCTTCCC TATTAGCTCT CTACTCTCTN CANTTACACG

SEQ ID NO:2262: (Length of Sequence = 348 Nucleotides)

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CTGTCAAAAA TGTATTATAT CAATAATTTT ATCAGCAGCA TTAAAGAAAT AAGAAATCAT TAGACAATAG AAGACAAACA  
 TGGTAATGCA GTCAGGCCAG CACACAATAC ACCGTTTTCA TCACACACTG TAACCTGAAT CCTGGCAAT TTCCTAGAGG  
 TATTAAATC ATACCTTATT AAGAATTATT GGGCCCNAGG AGTNGGGGGG TGGGGGGGTT GCAATCTGTC CAATCAACAT  
 CTGGCTCTTA CTTTCTCCCN GTAGTATTAC ATTGTATATA TATTCTTATA GGAAACAACT CAACTCCATG TTTATAAAAG  
 CACCATACGG TTTTCCATC CTGTACCA

SEQ ID NO:2263: (Length of Sequence = 352 Nucleotides)

CCCCAAAGT TGACATGGTC AATGAAGAAA TAGGCAAACA GCAAAAGTT GCAGTCATAC ACCAAATGAA AGAAGATCAA  
 AGCAAAATCC CTGAAGGAAT CCAAGTTGAC TCTGACGGGC TAATCACCAT ACAAATCCC ANTAACCTTG CCACGCTCAG  
 TGTTCGAGCC ATGCCCTTTC CAGAAGAAGT CACCCAGNTT CTGGAAGAAA ATAGTGANTT GATTGCTTCT ATGGAGCAGT  
 TGACATCCTC TTTGAATNAG GGTGAAAATA CTCACATGAT TCATCAGAAG ACCCNGNGA AAATTTNGGA ATTCAAAGGA  
 AAATTTNAG CAACANCTAA CAGGNGNTG AT

SEQ ID NO:2264: (Length of Sequence = 381 Nucleotides)

GCTTACAGTC TAGAACAAGC TTTCCAGCC CACAGCCCAG GATGGCTTTG AATGTGGCCC AACACAAATT CATAAACTTT  
 CCTAAACAT TATGAGATCT TTTGTGATT TGTGTTTAG TTTCATCAGCT ATCATTAGTG TTAGTGTATT TTGTGTGTGG  
 CCAAGATAA TTCTTCCAAT GTGGCCCAGG GAAGCAAAAA GATTGGACAC CCTGGTCTA GAAGGAAAGG CAAATATTAA  
 ATAACCTCAG AAAGTGATAT TACAAATTGT GGTGAGTTAT AAACACACTA TCAGGTGTTA TAAAGGAAGT GAAGGAAGTG  
 GTGAGGAAAT TCTTATCAGG GNAGTGATAT TTANATGAAG GGCCTTAGGG GATGAGTAGG G

SEQ ID NO:2265: (Length of Sequence = 301 Nucleotides)

CACTCTTCTT CCAATCCTGCC TTCCACAGC AGTCAGTCTG GTCCAAGCCA CCATCATCTG TCACCCAGAC TACCATAGCC  
 ATCTCTAAC TGTCTCTCCC ACTTGCCGTC TTTATCTGTC ACACAGCAGC CTGAGTTTAT ACACACAGCT GCATTCATTC  
 ATATTTTGCT TAAAACTGTT CAATGGCTTC CCATGGAACT TGGGAGTCTG GATATCTTCA CAAGTGTTIN GCATGGCCCA  
 GGACCAATCT GGACACCCCT NCCTGTTTGT NCATNCATGC CTTCACCAC TTTTGGCCT T

SEQ ID NO:2266: (Length of Sequence = 360 Nucleotides)

CGCCTGCATG CCCCAACA ACACAACITT ATTCTCTTCC CAAACATCTG TCAGGCCTGG CCTTCTGAG CAGGAGCTGA  
 GCAGGAACAG GGCTTGGCTG CCTCTCTCTT GCCACAGCTC TGACCTGGGC AAGGCTGGAA GCTGGCATCG TAATGGATGG  
 GGGAGTGGGT GGAGGATCTG AGGGTCCCTT GGGTAGGTTT CGATACCTTG GACAGGTGGG CCTCATCTG ACTTAGAACT  
 CGGGGAGGGG CCACTCTTCC TTCCCTTCTT TCCAGCAGCA GCTCCACCAC CCTCCACCTT CTGTCTCGA CATGTGTTCC  
 AGAAAACCCA GCCATGAGGG ACOGCTNIGA GGAAGGGTCT

SEQ ID NO:2267: (Length of Sequence = 391 Nucleotides)

GATGGAGTCT CGCTCTGTCA CCCAGGCTGG AGTGCACTGG CAAAATCTCG GCTCCGGACC CCCCCAAGAC ACATATGACC  
 CACCACCCCA TCTCTGACCA TGAGGCCACC CTGAGGTGCT GGGCCCTGGG CTTCTACCTT GCGGAGATCA CACTGACCTG  
 GCAGCGGGAT GGGGAGGACC AGACCCAGGA CACGAGCTC GTGGAGACCA GGCCTGCAGG GGATGGAACC TTCCAGAAGT  
 GGGCGGCTGT GGTGGTGCTT TCTGGAGAGG AGCAGAGATA CACCTGCCAT GTGCAGCATG AGGGTCTNCC CAAGNCCCTC  
 ACCCTGAGAA TGGGAGCTTG TCTTCCAGC CCACCATTC CCATCGTGG CATNATTGCT GGNCTGGTTC T

SEQ ID NO:2268: (Length of Sequence = 191 Nucleotides)

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CTTCTCTCTC CTGTTACAC AGTATTCGAT TATTTCAATG GCTACTTTCA GAGGATCAGC TAGAGGCTGA TGTGTTGTTT  
CAATGGTTAT ATTATTTATG AACTGAGAGT AGAAGAAAAA TTTGAGAGCA GGTTTTGGGA AAAAATGAAT TTAGACAAAT  
ATTTAGTAAC TGTATGATAT ATAAC TCCC N

SEQ ID NO:2269: (Length of Sequence = 237 Nucleotides)

TAGAAGCATT TTTTAAACAA CACTCAACTT TGTGAACCCC TGAAGATTTT TTGACCGTTC CAAGTCTTAA TGCCACACCA  
CTATTCACGC GAATTTATGC TACAACTGGT AACAAATGACC AGAAGCCTGA AGAATTAAAA TGCCAACACC AAACCTTTCC  
NTACCAGCTC TGGNCTATAT TGCTCCCATG CATTTAATAT ATTATNNGT TTTATANCCA CTTCTAAATA TTCTCAG

SEQ ID NO:2270: (Length of Sequence = 223 Nucleotides)

AAAGGTTAAG GAATTTCTTT TATTTTTTAC AAATTAAGAC TATGCAGATT TCATATATTT CTGAATCAAA AACACCTTTG  
TCTTCACAGT ATGAGTTAGA ATGCAGCCTG AGCTGAAAAT CAAGAACTA GAAAAGAAAG TGGTAGAGAT AACTATATTA  
AAAANCTGTT AGGTATTTCC TTTAAAGTA GGTGTTTTTT TTTTTTINCC NCTTTTTTTT TTT

SEQ ID NO:2271: (Length of Sequence = 363 Nucleotides)

TTTGATGGGT GAGGCTGGTA GAGCCACTGG GAGAATGTGG GGCAGTGAGG GGAGGGACAT CTTCTAGCA TCACCAGCAT  
CCTGAGCTTT GTCTTGTTT GGGAGTCCCA CAAGGGCTGG TGCAAGGNT AGCAGCTGCT ACTTGAACCC TAATCCCTGG  
GTGGATGTGG TCTCTGTGTA CTTAAGAGCA AATGTTTGTN ATGACATGCA CGGGTGGGCA GAGGTTGAAA AGAACAGGGG  
TCTACGGAGG AGCCAGGCCA GCCACGTGAG ACCCTTCTTT CTAAGTTGGC TTCTTGTTCA TTCCTGGGA TINGGGGAAA  
GAACGACAGA ACTTACCTTC CATCTTCTTT CTCACAAGCA GTG

SEQ ID NO:2272: (Length of Sequence = 150 Nucleotides)

CTCCCCCTGT AATCCAGCG CTTTGGGAGG CCGAGGCGGG GGGATCACGA GGTCAAGAGA TCGAGACCAT CCTGGCCAAC  
ATGGTGAAAC CCCGTCTCTA ATAAAATAC AAAAATTAGC CGGGCATGGT GACGTGCACC TGTAGTCCCT

SEQ ID NO:2273: (Length of Sequence = 330 Nucleotides)

TATATTATGT TAATAAAATC ATGTATAAGC AAAAGACCTA TGAAAGTATA AAACAGACCA ATGGATTTTA GTATAAAAGT  
ACAAAACGTT CATTGAGGTG GGTTCAGTTT TCCCACAAA ACTAACCTTT AAGAACTAC CACTTATCAA GTTTTGGTAT  
AAGGTATAAT ATGAAAGANG AAAATCCATA ATTATTTGAA AAACACGNT TAAATACCTT CCTTTTTTCC TACTACATAT  
CTCTATTAGG CTGGGTTTTT TTCACAACTA ATTGAATACA AAAACAAATA TGAGNATTTA GCTGTAATCT ATTAATCCCG  
ACATTACAGG

SEQ ID NO:2274: (Length of Sequence = 372 Nucleotides)

AAAAAGCCAG TTGCAGTGGT ATATGCCAT TGTCCAGCT AATCAGGAGG CTGAGATGGG AGGATAGCTT GAGCCCAAGA  
GTTTGGGACT GGGCCTGGGC AACATAGCAA GACCCTATCT CTAAATCAAT CAATCAATCA AACAGTGGTA TGCCACCCAG  
AATAAGTATC TTTTTTGAAG TAAAAACAA AAAGCGAAAT GGAACAACA GGTCTGGTAG TGGTGGCTGT CTGTCACTGA  
CAATGAGGTC TCTGCAGAGC CGTCCCTAC CCTNCCCAAC CCCCTAGACA TCAGGTCCCT TTCCTAGGAA AATGAGAGCA  
CAGACCTAGG NCCATGGNCT CCCAACTTT TTCTTCTCTT CACTACAGAT TC

SEQ ID NO:2275: (Length of Sequence = 370 Nucleotides)

CTTATCTTT TCTGAGGAT GTTGGTTTTA TATGGATTGT CTTTAAGCAT CACTTGAAA CGCTACAAAT AATGCAGCTA  
AATGTTAAG CAATTAGGAA ATAGGAATTT TTAATACAG AATTTTGCAC TGCAGAGTGT TTACAAGTAT TAAAAGATTG

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TATTACACAA CTGTTGTAA ATTCTAGTAA GATAAATTGA TACTAAAGAA AACAAACCCA GAAAGATCAA GTGACTTGGN  
TCACACAACA CAGGNATTAA GANGGAAATT AGTATTCTTT GTTGGAATAT TTTCCATTG AATAGTTACA GGAAAATTTA  
TTTGCAATAT TTACAAATTA AATGTGTATT GGACATCATA GTGGGGAAAT

SEQ ID NO:2276: (Length of Sequence = 349 Nucleotides)

TCTCCAGGTC CTGGAGGCAA CCGCAGAAAC AGAACANTGC AAATGCCAGC ATTTCCGCAG ATAAGCGTGG CCCGCCAGCT  
GCAAACACCC CTGACATGCA GCGTCTGTT TAAATCTGG TTGCCCGCTG CAGCCAGTGG AGCTCAGAGG GCTGCCCTGGC  
GGGTAAGGAC TCCAGGCACA CAGCAACAAG TGGCTGCCAC CTCAAATCCC ACGTGAATA TGATGGGGTC CGAGCCAGCC  
AGTAACTCCA NGAGGCTGT AGTGTGTAAG TTCGGCCAGA GTTTCAGAT ATAATANCAT TGGCCCCACG ACGTAGACCT  
GTGGCGGCTC AGGGTAAGA GACGGGAGC

SEQ ID NO:2277: (Length of Sequence = 182 Nucleotides)

CTTTATATAG ACTCTGGTTC TAGAACTCG CCTGCAGCCG CTGGCTGGAC CAGCACACGC TGACGGGGCC GGACTATTTA  
CAGGCCCATTT GCGGGCTGTA CCTTGGCCAC CTNCCGGCAC GGTGCTCAGC TGTGACGCA AAATAAGTTA GGGCCGGCCG  
GGCGGGCGG GCGGGGACG GG

SEQ ID NO:2278: (Length of Sequence = 276 Nucleotides)

GTATTATTTT CCCAAATGA AGCAAAGCAA GTACTGGGCG GGAGTCATCA GAAATACCTT GGGAGGTGGT GGGGAGGGGA  
GTCGGGAGCA TCAGGAAAA CCCATCTCAA CTCACGCCCTC TCAGGGGTG CACTGGAAA NICTTGCGTT TTCCATCACT  
GGTGCAAGAA GAACCTCCCC AGGAATGGCC AGTGGCCTTT CGCCCGTAAC AAGGCGCAC GCTCAGAGCA GTCCTCTCC  
TGGGCTGGGT GGACGGGAG GCGGAAGGA AAGCCT

SEQ ID NO:2279: (Length of Sequence = 193 Nucleotides)

TGCACCCATG GCCCTCCCA GAGCCCCAGG GCCCTGAGC AAGCAGGGCT CTGGCAGCAG CCAGCCCATG GAGGTGCAGG  
AAGGCTATGG CTTTGGG GGAGATGATC CCTACTCAAG TGCAGAGCCC CATGTGTCAG GTGTGAAACG GTCCCGCTCA  
GGTGAGGGCG AGGTGA CCTATGCGC AAG

SEQ ID NO:2280: (Length of Sequence = 401 Nucleotides)

GTGATTTTCC TGCTCCGTC TCTGAGTAG CTGGGATTAC AGGTGCCAAC CACCACGCC AGCTAATTTT TGTAGTTTTA  
GTGGAGACGG TTTCGCCATG TTGGCCAGGC TGGTCTCGAA CTCCTGACCT CAGGTGATCC ATTCCCTCG GTCTCCCAA  
GTGCTGGAAT TACAGGCATG ACCCATTGCG CCGGCCCCA CTGTTCTCTT TCTAATCGAG TGAGAAAATG GTCAGTATTT  
CTGTCAACAA AATTCATGAG GCTCTTTGTA CGCACAGGAC TTCAGGCCTT TCTCTCAACA ATCGCCAAAG CTGGAGGCAT  
CCACAATGGA GNAACAACCT GGGGGTTTTG AAAAAACAGG GAATGTTTCC AGAATINTTC TTCAAGAGTA TTTACATTTT  
T

SEQ ID NO:2281: (Length of Sequence = 217 Nucleotides)

AGCACGGGGA TTGTCCAAGG GTCTCCGCGC GCCCAGGGCA GTGTGGTGG CAGCACGAGT GCCACTATG CAGTCAACAG  
CCAGTTCACN ATGGGCGGCC CCGCATCTC CATGGCGTCG CCCATGTCCA TCCGACCAA CACCATGCAC TACGGGAGCT  
AGGGGCCCGN CCGCGNAAC TNACAGCACC AGGAAACCAA ATENATGTCC CTGCCCCG

SEQ ID NO:2282: (Length of Sequence = 302 Nucleotides)

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CCGATGGTGA AGTGGTAAGA GGTCGATGGC CTGGGAGTTC ACTTTATTAT GAAGTAGAAA TTCTGAGNCA CGACAGCACC  
TCCCAGNTTT AACTGTGAAA GTATAAAGAT GGAACAGAGC TTGANITGAA AGAGAATGAT ATTAAGNCTT TAACTTCCTT  
TAGGCAAAGG AAAGGTGGCT CAACTTCCAG TTCCCTTCC AGACGCCGAG GGAGTCGATC AAGGTCACGC TCCCGATCCC  
CCGGTCGACC ACCTAAAAGT GCCCGCGAT CTGCTTCTGC TTTCCACCA GGGCGACATT AA

SEQ ID NO:2283: (Length of Sequence = 314 Nucleotides)

GAAAAAGTGG AAGTCATCAC CGGGGAGGAG GCGGAGAGCA ATGTGTTACA GATGCAGTGC AAGCTGTTTG TTTTGGACAA  
GACCTCACAG TCCTGGGTGG AGAGAGGCCG GGGGCTGCTC AGACTCAATG ACATGGCGTC CACCGATGAC GGCACACTAC  
AGTCCCGACT AGTGATGCGG ACCCAGGGGA GCCTGCGACT GATCCTCAAC ACCAAGCTGT GGGCCCAGAT GCAGATCGAC  
AAGGCCAGCG AGAAGGAGCA TTCGCATCAC AGCCATGGAC AACGAGGACC AGGGCGTGAA GGTCTTCTG ATCT

SEQ ID NO:2284: (Length of Sequence = 262 Nucleotides)

GGCGTGACAC ACGCGCCCGG CCTGTTGGAG CATTTTAAAA TCTGATTCCT TCCCCCTGA AGTTTCCGTT CAACCTTNN  
CTGTGGTCAG GTTGATTNCT TTAATTGCTA AAACAAGTCA AAATTCAATA TCCATGGCAG CTGACAATTC AGACTTTGGC  
ATATAAAGTA AAGGGTTTAT TTTTCCATTC CTCTGTAAAT GGTGTTGINT TCACTTATTT ATAGTGCTAT GAAGCTGGTC  
ACCTGGGAGA ATGGCATAAC TG

SEQ ID NO:2285: (Length of Sequence = 193 Nucleotides)

GTGAGACACA GTCTTGCTCT GCTGCCCAGG CTGGAGGGCA GTGTCTCGAT CTGACTCAC TGCAGCTGAT GCCCCCTGGG  
TTCAAGCGNT TTTCCACCT CAGCCTCAA GCAGCTGGGA TTACAAACAT GNACCACCAC GGCTGGGTAA TTTTGTGTC  
TTTAGTAGAG ACGGGGNTTT GCCANGTTGG CCA

SEQ ID NO:2287: (Length of Sequence = 342 Nucleotides)

AGGCTGGAGT GCAGTGGCGC AATCTTGGCT CGCTGCAAGA TCTGCCTCCC AGGTTCACAC CATTTCTCCG CCTCAGCCTC  
CCAAGTGGCT GGGACCACAG GCACCCACCA CGCCTGGCTA ATTTTTTTTG TATTTTATAGT AGAGACGGGG TTTCACCATG  
TTAGCCAGGA TGGTCTCAAT CTCTGACCT TGTGATCCGC CCGCCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAN  
CACTTGGGCC CGGCCCTCAC CTGTTAGTTT TTCAAGAGGT GTTGTCTATG TCCACTGTGA TAGTTATTTT GTGTGTCAA  
CTGACTGGGC CACGGGGTGC CC

SEQ ID NO:2288: (Length of Sequence = 343 Nucleotides)

TTTTTATTGT AATGAAATTT TAAAAGGCAG TTACATTAGT TACACATATA CACAACCGAC TTAATAACTG TTAGTCATAG  
AGAACATTCA AGAAATACAA ATGATTTATC CACAGCACAG TTCACATCCA TAAGAAGAAA GAGAAATGGT TAAGTACTTA  
AACTGTCCAC TGACACCTGC TTATGAAATC TTTTCTTTT TTTCTTTTT TAAAGGAAAC TGAGATTGTT AGATGAAGCA  
AGCCGTCCTG CTCCGCACA GCCTGTGAAA CTTCATTTT GCCACTTTCA AGGTCAGTGC CCCACAGACC CTGGGCTGTT  
GTTGACCATA AACTAGCTT TGG

SEQ ID NO:2289: (Length of Sequence = 160 Nucleotides)

CGGGCCGCAA AGCTCAGCTC CTGGCGGTCC AGGCCCTGGT GGCTCTTGAT GATCAGGTCC ACGGCGGCTG CCACAGNTC  
CTCTAGGCCC TTCAGCGCA NAGCGNCTCC AGCACCTGT TGTGCTCCAT GTCCGTAAC TGCTGCACGA AGAAGCATAT

SEQ ID NO:2290: (Length of Sequence = 310 Nucleotides)

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CCGACTCTAC TGAAATACA AAATTAGCCG GCGTGGTGA CGCATGCCG TAATCCCAGC TACTCGGGAG GCTGAGGCAG  
GAGAATTGCT TGAACCCGGG AGGTGGAGGT TTGCAATGAT CACACCACTG CACTCTAGCC TGGGTGACAA GAGCAAACT  
CTGTCTCAA AAAAAAAAAA AAAAGNTTAA ATGAGGTCAT GAGGGTGAGA CCTGATCCA AGCTCATAAG TGTCCCTAGA  
NGTGTCTTA GAAGTGTCTT TAGGACACTT CTTTCTAAGT NTCCTAAGTT GGGGAGCTTG CTCTCCCCAA

SEQ ID NO:2291: (Length of Sequence = 270 Nucleotides)

CAAGACAGGG TCTCATTCTA TCTATTGCC AGGCTGGAGT GCAGTGGTGC AATCTTGGCT CACTGCAGAC TCAACCTCCC  
AGGNTCAAGT GATGGAATTC CCNCAATTTG TCTTTGACAT TAAGANGACA CCACATATAG ACGGCTGTTT GTCAGTGATT  
GCCCAGGNAT TCATGGATGC ATTINCTCTC ACAGAGCAGC AACTAGGGAA GGAAGCACCA ACTAATAAGC TTCTCTATGC  
CAAGGNTATC CCAACCTACA AAGAAGAAGT

SEQ ID NO:2292: (Length of Sequence = 332 Nucleotides)

CAGTGTCTCT ATATCTCTCA CCTTCCCTTG GTTTCATTTT TCTTCGCTTC CTGAATGAGA AGTGCCCTGAG ATACCTTCAT  
TTCTCTTGAA AGTATTGATC CAAGTTTAGA CAAATATCTC CCTCTTGTG GAGAGAATTC CTTATATGTG AAAATACCAA  
GACATTCTTG ATATTTAGCA GGCACCTCAA TATTGTCTC CTCTTTTTTA GCATAATTAA GCCAGACTGA TGTGTGCAAT  
TGAGTATCAT CAGCATGAGT AACCNTTTTA ATCTCTCTTC CCTTAACCTAC TTGTTCTACA CTAGAGTCTA GGGTCAGGGT  
ACGTACAGTG AT

SEQ ID NO:2293: (Length of Sequence = 255 Nucleotides)

GCACCTGACT TATGTGAGIN TCAGGCTTCA ATGCTGTINT TAGAGCTACT CCTTCACACA AAATAGITCA GAACATAGAG  
AAGGACCAAG GTTAATAAAT GATTTTINATC CCAACACTA AACATGATTG ATGGGTAGAG GCTGCCCGAA GTACTGTGTA  
AAGATGGAAT CTGAGATAGA AGAATGCTGT GGTCAATTAG TAATTCTTGC CCATGGAGGG ATTAGTGACA CATGCCTTGT  
ATATTGTGCA TCTGT

SEQ ID NO:2294: (Length of Sequence = 236 Nucleotides)

GGCTTCAGAA GCTATTGGAA GATTCATATC AACTTACTAA TAATCAAGCA CTTTCATATT AAGACAATGT ATGATGTTTA  
GTAAAATTGA TTTTNCCTA AAAGAAGTTT AAAATAAATT AGCTATTTCA AGAGNATCAT GGTGTGTCAGC AAATAGAAAT  
GTGTGCTTA ACTCAATCA CAGTAATATT CTGIGGTAGT CAATTGATTT CTTTGAGCCN TTATCTTTT ATCTGT

SEQ ID NO:2295: (Length of Sequence = 308 Nucleotides)

TTTTAATTTA ATCAGTAACT TTATTATAAC AAAACCTGTA TATTACCCAT TTAACTCAT GTGTAACATT CAGTGATGTG  
AGCTGTATTA AACCAGGTA TTAGTGAAAA TTGTCATTGT AAAACCTGGT AACAGTAGAC ATCTATGGGT GGTCAAGTAA  
TCAAGGACAC CTTTATTTT AAACAATTTT ATATAATTCA TATCAATATG CAAAATTACC ATAAAAGATA CANGGATTAA  
TACATATTTA CATTTTTAGA AATAGTACT CTGAGGTGTA CAGCTGTAC TTTTCTAAAT ATTTACAG

SEQ ID NO:2296: (Length of Sequence = 279 Nucleotides)

ACCCCTCCTG GAGGCTTTC CCCTCCCCAG GGCCTCCCTC AGGGCTACGG TGCCCCGCCA CAGTTCAGTT TTGGCTACGG  
GCCTCCACCT CCACCGCCAG ATCAGTTTGC CCCTCCGGGG GTNTCTCTCT CCACCAGCCA CTCCCGGGGC AGCACCTCTG  
GCCTTCCAC CGCCTCCGTC TCAGGCTGCC CCGGACATGA GCAAGCCCCC GANAGCTCAG CCAGANTTCC CCTATGGTCA  
GTATGCAGGT TACGGGCAGG ACTTGAGTGG CTTCGGACA

SEQ ID NO:2297: (Length of Sequence = 306 Nucleotides)

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CTGAGAAGAA AGAGTGTGTT GTAAAGGACA ATGACTTTGA GCCCAGAGCC CTGAAAGCTA ATGGAGAAGT TATCATTGAA  
ATTCCAACAA GAGCTTGTGA AGGACAAGAA AATGCTATCA AGTCCCTGNN GCATGTACAA TTNAAGCAA CAATTGAATA  
TTCCCGAAGA GGAGACCTTC ATGTCACACT TACTTCTGCT GCTGGAACCTA GCACTGTGCT CTTGGCTGAA AGAGAACGGG  
ATACATCTCC TAATGGCTTT AAGAATTGGG ACTTCATNGT CTGTTACAC ATTGGGGAGA GAACCC

SEQ ID NO:2298: (Length of Sequence = 307 Nucleotides)

AGTACACCTA GTATCTTTAC AGTGACTATT AAGTATTTTT GAACTCAAAG TATATATTCA TCTTAAACTC CTGGAACCTAT  
GAACCCCTCCC ATGTAATTTN CTGATGAATG AAAAGGAAAA CTTTCTTTCA AATAAGTGTG ATCTGTGTGA AAAGTATGTG  
ATTTAAAAAC ACATGTAAAT ATAATCTTAG CTCTAATGTT TTCTTTTGGG AGTTTGGGAA AAAGCAGTTA CATTTCTCTG  
TTGTCTGGTT TTTATCATTT GAAAATTGGA AGGATTCATT CTGGATTGCT GAGCTGCATC AGTAGGG

SEQ ID NO:2299: (Length of Sequence = 289)

GTITTTAATG CATTTTTTTT AAAGATTAAA GTAAATGTC TCAATGTAA AAAATACACA CCGGGCAAAT CCTTACCTGG  
NTAATAAATA TCTACATCAC AGTACAATAA AATTNCTNCT CTATAAAATT TAAATATGGA TTATAGTCTA TCACTATCAA  
AAGAAACACT ATGCTAATAT TTCCATATTA TTAAATAAAC AGGAAAAATT ACGNGCTTAT TTTAGAACCT GATGCCATAG  
CCGTTGGAAA GGGCAAAGAG ATTCAAATGT CGATCATCAC TCTCCATTT

SEQ ID NO:2300: (Length of Sequence = 371 Nucleotides)

CACCCATTGA AAAAGCAGCC GCCCTCCTTC CCAGGAGCTG CTGAAGAGAG AGCCTGCCAG AGCCTTGCCA GCAGGGACAG  
CCTCTTAGAT ACCAGCAGCG TCTCAGAACC CAACGTGTCC TTTGTCTCNC ACTGTGCGGA CAGCAACAGT GGTGACATAG  
CTGTINATCGN GGAGGTCCGG ATGGAAAACC CAAAGGAGAG TAGCAGTTCC CTGAAGACTG GGAGGCACAG CTNAGGCCAA  
GACAAACCAC ACGNAACTTA CCGACTGCTG AAACGCAGGA NTCTGATCAT AGAAGCTGTC ACCAATCTTC GCTTAATCGA  
GAGTTTATTC ACGGTTTCTG AGATGATCAT GGATCAGGAG AAGCAGGAAG G

SEQ ID NO:2301: (Length of Sequence = 287 Nucleotides)

ACTTGGTGTG GGGATTTGTT GTGAGGTTTG CTGACACCTT GACCATTTTT CACTGGCTGG AAATGAAAGG AACTTCCCAC  
TTGCTCTTTG AAGGCAATTC CATTCTCTCC AGGGTCTTCA TTTCCTTCCC ATATTCTCTC AACTTCCCAA ACTTCTGAAG  
AAGGGAGCAA ACTTTGGCCA CGAGGAAGGA GTNGAGCTGC CTCGTACTTT GTCAGTCAC CTGCACTGGT TGAATCCACC  
TTTCCTGGGT CACGCGCTG TGCTGGGTGG TCACAGCCTA GGACCCC

SEQ ID NO:2302: (Length of Sequence = 358 Nucleotides)

GGAACACAGG ATCCAAACTT GTCGGGGAAC TCGGAGAGAA GATCATOGTT GGCGCGGTCC TTGGTGGGCC CAAGGATGAT  
GATGGGGCGA GCATAGTGCA CTTCATCTG CGTCACTGTC TCGTAGCTCA GAACCGAGTC TTCTCGACCC TCGATCCAG  
AGCTGGAGCC CAGTCCTTG GCCTTTAACC TTGACCACTC TCGTGGCTCA ACCCGCCGTT TGCTGGGGAT GAACCCAATG  
TCGTGGGTCT CACTGTCAGA GTGGACCGCG CGTGNTGCC ACCACTCCTC ATCACTAGCA TCGATGACAT GCAGCACATN  
CCCAAAGCGG AAGTTCAAGG GCCTGGCTCA GGAAGCCG

SEQ ID NO:2303: (Length of Sequence = 403 Nucleotides)

GTCAGGGGCT CCAGATCATC CTCCTCCAAG GGCCCCGAG GCGCTCCTT GGCTCTGGC TCCTGCTTGC CGCTGGCCTC  
CAAGATGGTC ATGATGGAGT TAGGGATGTN AGCTTGCTGG TGGGGGGTGA AGGAGCGGAC ATGGGOCAGC AGGGGCTCCC  
GGAGCTCTGG GCACTTNTCA AAGACGGCTC CCAGCTGCTG GGGCGGCANT GCAGGATGAC CTGGAAGCTC TGGGGCTTTG  
TGCGCTGGCA GCACTTGATG AAGCCCTCCC ACACCTTGGG GTACTTCCAC AACTGCTTCA TGATGAGGCG GGACAGGATG



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TTCATGACGG AAGCCCCCA GCGGGGGTA CATGGTCANG GACCTGGATG ACGGTCTCA TGAGCAACAT GGGCAAGGGG  
GCT

SEQ ID NO:2304: (Length of Sequence = 376 Nucleotides)

ATCTTGCTAT GTTGCCAGG CTGGTCTGA ACTCCTATTC TCAAGAGAGC CTCCTGCCTC AGCCTTGTA AGCACTGGGA  
TTATAGGCAT GAACACCGC ACCCAGCCAA GATTGCCATT TTGTATGATG AGACTGGAAG GACCCCATG TTTCAGGATT  
TTGCTACAAT ATACAAAAA CAATCTGTA GACAGTGGCT GGGCTTTTTT CCTGCCTGAT TAGITCAGTG CACATACAC  
TTGGACCAGA GGATCTGGGT TTGAATCCCA TCTCTGATAC TTCCCAAAT GAGCTGTTTT CCTTATTTGT AAAGACTAAG  
ATCGCGTATG TCAAAGAGCT CTGTAAATC TCAACACATA CAAAGTACTA CTGCTG

SEQ ID NO:2305: (Length of Sequence = 354 Nucleotides)

CTGCCCAGCC TGCTCCTGGC CCCCTGGAAG CCTCCCCACA GCTGGTAATC TGGACITAAG GATTGCTGGG CCACCGCCTC  
TCTGCCTACC ACCATTCCAT ATTTAAGTGG AGCCCTACG TAGAAAGGCC CCGGGGCTTT ATTTTAGTCT CCTTTTCAGG  
GATGTCGTGG GCGGGGAGG GGGTCTTGG TGCTACAGCC CTCTCCAC CCCTAAAGGG ACGCCGACGC TGTTTGCTGC  
CTTCACCACA TATTAGTCT TGACCCTGGC AGGGGACCCC ATGGAAAAGA TGGGAAGAG CAAATACAT GGAGACGACC  
CACCCINAG GGATGCTGC TTGGGATTCC CACG

SEQ ID NO:2306: (Length of Sequence = 345 Nucleotides)

CCAAGATCCT AAGTAATTCC AAATGCCTTA GATATCAATG AAAGCTACAC ACCATTGAGA TGGGCAAAT TCTTTCTCTA  
CAAAGGGAGT AATCAAGTAA ATACCTGTCC TCTTTCAATG GACTGTGACC TATTGAGCAT TGTTGATGAT GTGTTTTAG  
ATTTCCAGGT GAAGTCTGA CCTACCTGT TTGGCCAAAG ACGTAAATTG AGAGGAAAGG CCTTGGTCTT CCTGATCAAC  
CAGCAATTAA CGAACAGTGG CTTAATGCAG ATCACTCAAG AGGNAGCATA GCAATGTAA AGGAATATAA GTAGGTGTG  
GATGCCTTTT TCCTAGACCA GGAAT

SEQ ID NO:2307: (Length of Sequence = 337 Nucleotides)

AACAGAATGT AAAAATACGC AAGTCAAAC CTGGTAGAAC TGCAATGAGA AACAAATGGA TTCAATATTA TNAGTCGGGA  
AATTCAAGC CCTCTATCG AAAATGGACA GATCCAGCAG GCAGAAATT AGTAAGGACA TTGTTGAGCT CTGCAATACC  
ATCAATCAAC TGGATATAAT GGACATCTAT AGACTACTTC AACACAGCA GAAGATACAT TCTTCTCAAG CTCACATGGA  
ACATTCAAA AGATAGACCA CACGAGGCC CATAAGCAC ACCTTAACAA ATTTAAAATA ATATAATCA TACAGTGTG  
TCTCAAACCC NCAGTGG

SEQ ID NO:2308: (Length of Sequence = 216 Nucleotides)

GAGGAGTAAA CINTTTCTG AGAAGCATGC TTAGGTGTG GGACAGGAAG TGGTAAAGGC AATGCATCGT CCACAGAGGT  
GGATGAAGCA GTNACAAAG AATGATAATT TNANCTGCTG GTGGCATCTN CACTGCTGGA GTGTATGGCA GCAATCATCT  
TACTCTCCAT CATCCTGGTG GGGGGCAGTN GTGCAGGAAA GCCACAGGGA TTOGCA

SEQ ID NO:2309: (Length of Sequence = 289 Nucleotides)

GGGGCTATGA AAATACAAA AACATTAGCA CATTCAATG ATGTATGTGT CTACAGGCAT TTNCCAGCC CTATGAGAGT  
NCTGCAATTT GAGAAGTACT AAAATGTATT GTTTGGTGAC AAGAACTGCA ATAAAAAGAT AAATGATTIN CTGAATGTG  
TGGCAAAGCA GTCTATTTCC ACTGCAATTT CTGCTACTAT TAGCTTAAAA ATTGCTGAGA CAAAGGACAA CCTTCTGATT  
ATNCTGCTGA GATCTAATGC AAAGTCCTCT CAGANGCTTC ACTACACAT

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SEQ ID NO:2310: (Length of Sequence = 359 Nucleotides)

CTGNGGGCTG CCTCTCGTIG GTCAAATCCA ACCAAAAGCT AAGAGCTGGA GAGCTTGGGT GGTGCATCCA AGGAGGCTTG  
CTTCCTGGGG CACAGAAGGG AGAGTGGAGA AGGATGGAAA GTGGCTCTAG GGGAGGAAAT GGAGAACATC CAGAACTTTA  
TGTACCTCT GGTGCTTGAA GGCCTTTCTC CAGGGAGACA AAAAGTTTGT NTTGGCTAAA GCTCCCTGGT TGCTCAGGAG  
CCAAGGGTCA CATAATGTC CAATGGGGGT TTTGCTCT GAAAGCCTCT GAGGTATAAT TACTTGCAAT GNNAACATCC  
CTTTCTCTC TCTTCCTCTG CCCACCTCC ATGCCAAGG

SEQ ID NO:2311: (Length of Sequence = 324 Nucleotides)

GTTNGGGGCC GGCCTGGGCA ACATAGACAC CATCTCTTTA AACAAACAAA CATCATTAGT TTCTACATTC TACAAGGTGA  
AAGACTAATT AGAAGTGAAA AATACCACTG AATGTTGGT GTACAAATGG CAGCATAATT TGATTTACAC TAGATTTTAC  
ACATTTGTGT CTATTTCAAA TAGGTACTTT TACATTTTCC TTAAGTGCAT CTGACACAGA GTGAATCACA GATATATGTT  
GGTGTGAAA GCAGAGGTTA CTATTATTAA NCGAAAATTT TTGTGGTTTT GCAGTCATCA TATCTAATGT GGTACAGAT  
TGIG

SEQ ID NO:2312: (Length of Sequence = 362 Nucleotides)

GNAGTTTATA AAGCTTTTATT AAACATTCA AACAGCTGTG CAACGAACAC ACCAAATAAA AGCTCTAGAA TAGCAGTCCA  
GACGTTTCAC AAGTATGGCC TCACAGTCCC ATTCCCTAGA TGGACTGCCT CCAGTNCIGT NCTCTGCTG GCCCATCTCT  
CTTTCCCTC AGGCAAGAGA GAGATGGATG GNTCAGACTG AAAGGACAGG CATGCTGATC TCCAGCAGGC AGGGGCCAGG  
AGAAAGTCTC GTTTGCCAAC ACTTGTTACT GAAGCGCAGA AAAAGCAGCA AGTGACAGTC ACAAAGTCTT CTTGGGGTAT  
TCTTCATAAC GTACAGTCTA TATGCGCAGG AACGAGGAAG CT

SEQ ID NO:2313: (Length of Sequence = 449 Nucleotides)

TGTAATTTTT AAATTAAGAC TGCCTTAGTG AGAAAATTC AGCAGGTGAG TTAAGGGCAC GAGGAAAGGG CCTTTGTGCA  
GAAGTAATGA CATAGGCAAA TTGTCAAAGG AGAGGTTCCT TGGTGTATTT NTAGAAGAAA GTAGACCCAT GTNTCTGAAC  
CCAGCACACA GTTCACTTAT GGTGGTTTTG AAATCTGCCC TGGAAATTNC ATGCATCTTT TAAATTTTTG GTTTATTTTT  
NCAAGAAATA AATGAAGTCT TTATTTTINC AATGAGGGCA ATGTTTATTA AGAACAGCAC ATAAGGTAGA AAAGAAGGTT  
GGTTTCTAAT CTGGTTTCAT CTCCCCACT GATCTTGAGT TTTAAAGCA TAGAGAGCAC GATCCTTCTG TGGGGTCTCC  
ACTGTCAGAG AGCCTGINCA GATGAGCAGT CACACTGTTA CTCCACAG

SEQ ID NO:2314: (Length of Sequence = 316 Nucleotides)

CGAGGCAAAC ACAAAGGGCT CTTCTGCTT CTCTGACCCC ACCTGCAGCA GGTAGTGGAT AACAGCCCCT ATGGCCTCCT  
TCATGACGCT CACGAGCTGC ACCTTCTGTG GCTCCTTAAG CAGTGACTGC TCACAGGAG TGCATTCTG GNTCCCAAC  
TCCATGAGGG CATAGCAGGC GTCCACCACA TCTCTTTCA CCTCCGTGCC CGTNTCCTCC AGTGCCAGCC GCACTTCCAC  
GNACGNCAGA TTCACCAGCA GGGCCAGGAA CTGCTCCCG GAGCTGCCCG CCGGGATCCA GTCGGAGCCG CAGGTG

SEQ ID NO:2315: (Length of Sequence = 286 Nucleotides)

ATTTTTATGT GTAGACAGGC TGTTGGTTC CTTCACTTAA ATTGAAGCTC TGTGAACTT GAGACACTTA AGANTCTTGC  
AAGTNTGAAA AGTGGAGTGA AACAAAACCA TTTCTAAAAC GAAAATGTGT AACINCNTTC AGTTTACAC AGTGNAGAAA  
TAAGTATTAA ACAAGTTAGT CTCAAACGGT TATATCTTAA GGTCAATTTA TTCTGTAT CATTAAGTAG ACATATCTTG  
GTTTAGAGAG CAGCACACAA GACATTGTGT ACTNITTAAT AGCTAA

SEQ ID NO:2316: (Length of Sequence = 414 Nucleotides)

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AATCATAGCT TACTGTGGCC TCGATGTCCT GAGCTCAGGC GATCCTCTCC TTATAGCCTC CAGAGTAGCT GGGACTATAG  
 GTGCGTGCCA CCACACCCTG CTAATTINAT GTTTTGAAGA GACCGGGTCT CACTTTGTG CCCAGGCTGG TGTGAGACTC  
 CTGGGCTCAA GCTAAATCAC CCACCTTGCC TTCCCAAAGT GTCGGGATTA CAGGTGTGAG CCACTGCGCC CAGCTCTGAT  
 TTTTGTATTT CTACATAAG GCGACATACT TAGTAGCTGT GCGTCTTGGG GCAGATACCT CCCAAAGCCC CAGTTCTGTC  
 ATCTATAAAT AATGTAACAA CAGGGCCCCG CTCGCAGGT TGCTGTGTGC ACATATGTGT GTGTACGTAC CCATGTGCCT  
 NTACGAGAAG GGCT

SEQ ID NO:2317: (Length of Sequence = 166 Nucleotides)

GCAGTACTA TTATTAACAT TACAGTACCA AGCATCCGCA AGAGACAGTC ATTGTINATT TTINATCAAG AAATAGGGCT  
 GTTTTATACT GTTATTGACA TCAACTTTTT CCCAGTGCAT TTTTCAAAA TATTAATAAG TTCATTCTTT TGTGCTTTTA  
 ACTTCC

SEQ ID NO:2318: (Length of Sequence = 374 Nucleotides)

TTTATTTTAC ACTTACAAAA GAAATGCCCC ACCCCTTTGC CCCATTCCCC CAAAACAGTC TCTTTTTTACA AACATTTAAA  
 AATTAAAACC AAATGAAGAT AGACAAGTTA ATTTCACTAC AATTATTTIN CAGTGTAGCT GTCATAATTA GAGTTTAAAT  
 TTCCTACAAG TGACCAATGT CCAAGTGAAT TATAGGGAAA TCCTGATTAT CGGCCAAAGG AAATTCAATA TTACAAGTTA  
 GCAAATTTCTT AGTACAAAAA TAGTCCGTGT GTTGGAACTA CTTTTCCTTG TTACATAGGT CTTAGGTCAG TCTGCTGTNA  
 ATACCTTAAC GNTTCCGGAT TCTNNTCTCA CAAATG AATGTCACCT GCTG

SEQ ID NO:2319: (Length of Sequence = 380 Nucleotides)

CATCTTAGTT CATGGTAATC TCCTTGGCAG CACTTATGT CTTTGTGTGA GAGCAAATGA TAGAGTCATC CATTCAAGTT  
 AATTAAGAGC ATCTGCATTG CAAACTGGT CACTAAATG CTCGCCAAT TTGAGGCTTT TTCTCTGCCA ACACAAATTA  
 ATTTTAAAG TAGCAGCATT TTCAGGAGAG ACCAAATAAA GAAAGCAACA ATAAAGTTGC CTGTCTAGTG AGATGTCCCC  
 AACTATCAA CTTTAAACAT ACCTTTGCCT TTINATAGTAG TTCTTCACAC AACTGCCTT AATCAAAATG CGTGTCTCTT  
 GCTCTGTCAT TTTATGTTTT GGCTCTTTAG CAACCTAATT GTATGGTTAG ACAGATTCCT

SEQ ID NO:2320: (Length of Sequence = 348 Nucleotides)

GGAGTCTCT TGTCCACGGA GAGCAGTGT GAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG  
 TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATGGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG  
 AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCNAGGA GAAAACATGT CCAAATCCT AAAAGCACGA  
 TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTTNATA GGGGGTACT ATGAAGTTAC TTCTCCAAC ATTAGTGCAA  
 ACACAAAGTA NGAAGGTGGT GCCACACT

SEQ ID NO:2321: (Length of Sequence = 330 Nucleotides)

ATCTAGACTT TNAGTTCCCT GCATCTGCCA CCGTAGTTTC TAGCAGGAGT AGTGGGGGGA GTAATACAGA TTCTNCCCTA  
 GAAGGGGACA CTGGTAACAT GTCCACTCT TGGATTAGCA GGGGTGGGTC CAGGAAGATG ATATTINNT CTTTGTGCCA  
 CCCCCCTGGC ATTCAGCTGG ACCCAACTAG GCCATCATGA GTGGCTTCTC CCTGTCATCC CCAGGGGTCA TAGGATATCT  
 ACACCGCCTT TNAGACCCCA CCTGCACTC CCATCCCTTC CTCTCTCCCC GGTTTCATGCC CTGCACTACA TAGCACAGCC  
 GGGATGCTIN

SEQ ID NO:2322: (Length of Sequence = 352 Nucleotides)

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TTGACAAGTA AGTGTATATA TTTAAGGTGT ACAATGTGAT GCTTTGATAC ATACAGTGTG AAATGATTAC CACAGTTAGG  
TTTAATAATT AACATATCCA TCATCTCACA TAGGTATGAT TTCTTATGTG TGTGGCGAGA ATCCTGAAAA TCAACTCTGA  
GCACATTTCA AGTGTACAAT ACAGTATTTA TGATAGTCAC CATGCTGTTA ATCAGATTGC CTACCTTGGT TAAAGTGCAG  
ACTCAGGTGA AGGTCTGGAT GGAGGATCAT ACTTTAATTG ATTTAGACTC TAAAATAAAT GTATATAGTT ATTTTGTCTA  
ACCTAANGAA CCTACTCATA AATGGGCTAG TG

SEQ ID NO:2323: (Length of Sequence = 316 Nucleotides)

GAGACAGAGT CTCTCTCTGT CGCCCGGGCT GGAGTGCAGT GGCACAACCTC AGCTCACTGC AACCTCCGCC TOCCAGATGT  
CCAAGTGATC AAGGGGTTTC ATTTGCTCTT GGGGGATTAG GTATCATTGT GGGAGGAAGC ATGTGTTCTG TGAGGTTGTT  
CGGCTATGTC CAAGTGTCTG TTAATAATAG TGGAGACGGG GTTTCACCAT GTTGCCAGG CAGGACCTCA GGTGATCTGC  
CCACCTCAGC CTCCCGAAGT GCTGGGATTA CAGGCATGAG TCACCACACC CGGCTTCATT TATTTTCTTA TCCATG

SEQ ID NO:2324: (Length of Sequence = 300 Nucleotides)

GGGACAGGA GGTGACCTCG CGAGCAGACG CGGCNCCAN ACAAGCAAGC CCGCCCCGGC CTCTCGGGAG CGTGGGGCA  
GAGGCTCGG ANCCAGGAG GGCGGAGCC CTCATGANTT CANTINACCTG CTTCTCCCCC TTAGGTCTA TCAGCCACAG  
TNTCTGCAAG TTTCCAAGAG CAGCAGAAAA TGAACACATT NCAGGGGCCA GTTTCATTCA AAGATGTGGC TGTGGATTTC  
ACCCAGGNGG AGTGGCAGCA ACTGGACCCT GATGAGAAGA TAGCATAAGG GGATGTGATG

SEQ ID NO:2325: (Length of Sequence = 303 Nucleotides)

CTGTCTCAAA TAATAATGAT AATATTINCT TATGCTTACT TTAAGTAAAG ATTACAGTAT ACATTACAAC ATATGCGTTT  
ATTGACTGTT TATGTTATTG ATAAGGCTTC TAGTCAACAG TAGGTTACTA GTAATTAAAGT TTTTGAGGAG TCAAAAGTTA  
TGTGTGGATT TTCAACTGTG GACTTTGGTG CCTCTAACCC TGTGTTGTTT AGGGGTCAAC TGTGTATTCT TCTGTGGNA  
ACATTTTTAG ATGTTATAGC CTTTAGACAT TAGAAATGGA AATTTAGTTG AACTCGNGTG TTC

SEQ ID NO:2326: (Length of Sequence = 348 Nucleotides)

GTTGGTCTCG TGTGGCAGT GACACAATCT CTCCCGTCCC TGGAGGCCAG CTCCCCCGTG GCCAACCTCA GGCTCCCAT  
GGCATCTCAG GGCTCCTCCA GCCAGACTGG CGCCATCCAA TTAACCTGAT GGTGGCTGAG CAGCTCAGCT CTGTGCCAGC  
CCCTGCAGGA GGCAGATCAT GTTGTCCAGG CCCAGAGGT AGCGTCTCTC ACGGTTGCCN TCAGCCCAGG GCAGCCTGTG  
GCTGAGCGTC TGGTGGTCCG GCAAGGCCAC CGTCTTGCCG AAGTCTATCA TCCAGACCTT GGCCAGGCCG GTGTGGTCTG  
GCACGAAGAG GAGGGAGCTT CCTACCAC

SEQ ID NO:2327: (Length of Sequence = 392 Nucleotides)

AGCTGTTTTT TCCTAGCTGC CAAGACTGTT GAGGAAGATG AGAGAATTCC AGTACTAAAG GTATTGGCAA GAGACAGTTT  
CTGTGGATGT TCCTCATCTG AAATTTTGAG AATGGAGAGA ATTATTCTGG ATAAGTTGAA TTGGGATCTT CACACAGCCA  
CACCATTGGA TTTTCTTCAT ATTTTCCATG CCAITGCACT GTCAACTAGG CCTCAGTTAC TTTTCAGTTT GCCCAAATTG  
AGCCCATCTC AACATTTGGC AGTCCTTACC ANGCAACTAC TTAAGTGTAT GGCTGCAAC CAACTTCTGC AATTCAGAGG  
ATCCATGCTT GCTCTGGCCA TGGTTAGTCT GGAAATGGAG GAAACTCATT CTTGATTGGC TTTCTCTTAC AA

SEQ ID NO:2328: (Length of Sequence = 256 Nucleotides)

ACGAGCACAC TCTTCACAGT GGGGCGGAAC ATCAGAAAAT GGGAGCCTTC TTCTAATGGC TGTCCTTTTC TGTGGGAAA  
AAAAAAAAC AAATCCTCCA AACCACACCG GATGGTTGTA AAAAGCTGCA ACGGAACCTT TGGCACCNGA TGAGAAGAGA

GGCCTTTTAA TGCCATAGCT AGTGATGATT CANTCAAAGC ATCAGTCTAA GGAAGGATGA TGGGGGAAGG GACCNNAGAT  
CACAGNCCTT CTCCTT

SEQ ID NO:2329: (Length of Sequence = 383 Nucleotides)

AGTAGAGACA GCATTTCAAT ATGTTGGCCA GGCTGGTCTC GAATCCTCA CCTCAAGTGA TCTGCCTGCC TCGGCCTCCC  
AAAGTGCGGG GATTACAGGC GTGAGCACNC ATGCCTGGCC TTTTTTTTTT TTTTTTTTAA CGAAGTTATT TTCTAGAGC  
ATTATAGATT TGTTTTTATA CAGTTAAGGT TCTCATCCAT CTGGATTTTT TGGTAAAGTG GGGGAGAATA AAATGAGGAG  
CCNCTGTTTT TTCTCCAAA TGGCATGTAT TGTCCCAACA CAATTTATTG AATCAATAAT TCATCTCTCC CATACGAATT  
TAACTATTG AACTTTCACA TCAAAATTTT GGAACACAA AGTAGGTTTA ACAAGGTGAG AAC

SEQ ID NO:2330: (Length of Sequence = 392 Nucleotides)

CGAAACGNTC TCAACCTATT CTCAAATTT AAATGGGTAA GAAGCCCACT GGTACAGCATG GCAAAGCCCC AGCTCTAATA  
AAAAATGCAA AAAATTGGCT GGGAGTGGAG GCGGGCGCCT GTAATCCAG CTACTTGGAA GGTTGAGCTG GGAGAGTTGC  
TTGAGTCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCAC ACCACTGCAC TCCACCTTGA GCAACAGACT GAGACTCTGT  
CTCAAAAAA AAAAAAANT TATGCAAAGT GTCTTTTCCA ACAAAGTGT AATGAAGCTA GAAGTCAATA ACAGGAAAC  
CTGGGNGAAT TTGCAAGTAA GTGAAAGTTA AACAACATTC TTAACCAAGT GCTCAAAGGA GGAAATGACT GG

SEQ ID NO:2331: (Length of Sequence = 284 Nucleotides)

AAGAAAAGTA AATTCATCTT GCTCACAGTC CTCTCTGGAA GAGTTTAGAA AGCAAAGAAT TCACCGACTC AGCAGGAAGC  
AGAACGAGCT GTTCTCTCTT TTGACACGCA CAAGCTAATC CCTAGAGAG TGGGGATGTG GGAAACGGAG GGTAAATTAAT  
TCTTTGGTCA CTGGTCACT GCTGAATAGC CTGGTCACT TTTGGCTCTC TCCTATTTTA GGGGGAAAAA TATTTTNGIT  
TCTTTTTTTT AAAAAATAAA ATGTTCCGAC AATGGGAGAA AATT

SEQ ID NO:2332: (Length of Sequence = 349 Nucleotides)

ATCTTAAAAA GATTTTTGT ATTTNCTTTT GAGACTGGGT CTCAGTCTGT TGCCAGGCT GGAGTGTAGC AGCCTGATCA  
TGGCTCAGTG CAGCTCTAC CTCCCAGGC TCAGGTGATC CTCCCCTTC AGCTCTCTGA GTAGCTGGGA CTACAGAGGT  
GTGGCACCAT GCCCGCTAA TTTTGTATT TTTTGTGGAG ATGGGGTTTT GCCATGTTGC CCAGGCTAGT CTGAACTCC  
TGGATGTGAG CCAGTGGCTC TGGCTATTA TTTTAAATAT AGTTCTCTTT ACTGCCAGTA GCTTTCATAT AACCTAGCG  
ACTAGATTTA GTCACCACTG CTTAATTCC

SEQ ID NO:2333: (Length of Sequence = 353 Nucleotides)

CCACCTCTCC GTTCTCTGCT TCTNAACCAC AGCCGCATCC TATTTCAGC CCTCAAGATT AAGGATGAAA ATTTGACTTT  
TTAATTTTAT TATCTTGT TTTCTTCTT ACTTCATTAG AATCATGTTA TTGGCCTAAA ATACTGTATG TAAAGGATGC  
TCTGGGGCCC ATCTGGAAGC CTGCATTCTC TGGGGATATA ATTACGCTAA GCAATTTTTT ACCAGGGACA GCATGACTTA  
GCTTCTACCT GGGCATCCTC TGGCAACACA GCCCTCAGTT CTTCCAAAGG GATTGGCTGC TGTCCCTTCA GGCCTTCTTC  
TTGNGTGTGT GTGTGTGTGT GTGTGTGTGA TTC

SEQ ID NO:2334: (Length of Sequence = 279 Nucleotides)

GCGCCTCTA CNACTGCTG CTGCCGNCCT CATNCTGGTG GCGATGCTGC AGCTGCTCTA CCTGTGCTG CTGTCCGGAC  
TGCACGGGCA GGAGGAGCAA GACCAATATT TTAAGTTCTT TCCCCGTCC CCACGGTCCG TGGACCAGGT CAAGGCGCAG  
TCCGNACCGC GCTGGCCTCT GGAGGCGTCC TNGACGCTAG CGGCGATTAC CGNTCTACA GGGGCCTGCT GAAGACCACC  
ATNGACCCCA ACNATGTGAT CCTGGCCACG NACGCCAGC

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SEQ ID NO:2335: (Length of Sequence = 386 Nucleotides)

GCCTTTTGT CATGGTAGCA AAGTGGCTGC TGTGGCTCCA GGCATCACAC CCTCAATCAA GGTAGGAAGA AGAGGCCAG  
GGAGGTGTTA GCCATGCCTG TTTCTTTTAT TGGAAAAGCT TTCCAGAAG CCCAGGTAGA CTTCCTCTC AATTTCAITG  
GCCACACCTG ATCATATAGC CATCTAAGC TGCAAAGGAG ACTGGAACAG TGAAAATCTG GATTTACAGC CTCCACAGT  
GGAGTGGCTG GAGATACAGA GTTGGGACGA CCCCTGAAAA GTGAACCAAG GTCGTCGCA CGGCTGCCCT GGAGGGCGTG  
GTGCTTGAGG TCCCTTCTAC CTCTGGGGCT TCATGGAATG ACTTGTTGCC TCCATGGAGC ACCTCT

SEQ ID NO:2336: (Length of Sequence = 258 Nucleotides)

CCCTAGCAAA CCACTGATGA CCGCCTGNA GGGGCCAGCC TGTCGGTGCT CTGGGCCTTG CAGCTNTTTC TNTAGGGTTA  
GCGGTGGTGC CGGGTCACT TTCGAACTT TTTTTTTTTT TTTTCAAAAA GGAAAGTTTT TAATGGAAAG TTGAGCCAGA  
ACTAAACCAG GGAGCTGTCT GAAATCATAG CACCCCATCC GGGTGGCGGG GAGATCAACT CCGAGCTGTT TTTCCGAGGC  
AGTGAGGAAC GGTGCCGG

SEQ ID NO:2337: (Length of Sequence = 338 Nucleotides)

ATCTCTTTTC CCACTTCATA AAAGCAAAT ATGTAAGACT AGCATCTGGT TTTTGTCCCA ATAAAAAAT CCCACAACCT  
TCAAGATATC ACTCTAGCTT TCTAAAGTAG AAAGGCAATT CAGGCAACAA AAAATATTTT TTAATAATCT ATAGCCCAAA  
TCACCAAAAG GTAAGGAAAG AACTTTCCTA GCAAGCTCTG GAGAAGACCT AATTTGGNCA TCAAAATGGA GCTTTCAGAC  
ACTAATCAAG GCCATTAAAT AAAAAAATT TTTTCAAGAA ATAAGGCAGG TTGGATCTCT TTTCCACTT CATAAAAGCA  
AAATATGTGG CAGACTCT

SEQ ID NO:2338: (Length of Sequence = 410 Nucleotides)

GGGTCTTGCT ATGCTGCCA GGCTGGTCTT GAACTCTCA ACTGCAGTCT TGACCTCCCA GGCTCAAGTG ATCTTCTTAC  
ATAGGCCTCC CAATGTGCCA GGATTATAGG CATGACCACC ATGCCAAGCT CCAGATGGTA TTCTTAATTC AGCTCACAAT  
GTGCCCTCAT CAGATTGCTA GTGGCCAGGA GTGAACAACT GAGTGACTTT AAGAATCAGG ACACCAGGAA TATGTTCTTA  
GAAAGTGAAG GTATGAGTGG AAAACCTGGG TTGGATTATG AACAAGGCC ACATGTGTGC CAGAGTGGCC AGGGCAGGGA  
GCAGCAGCAG GTGCTGGTGA AAGGAAGGTG GATTACTGGG GGCAATGCCT GTCTTTGTGT TATGGGTTTC TTTTGAGGGA  
AGTAGATAAG

SEQ ID NO:2339: (Length of Sequence = 336 Nucleotides)

AGGGGAGGAG GGGGCTAAG GCGGCTGGAG GAAGAGCGAA ANAGATGGAA GCCTTCCGGC AGAAGGCAGA GCTGGGGCGT  
TTNTTGAGAC ATCAGTATAA CGCTCAACTC AGCAGACGCA CACAGCAGAT CCAAGAGGAG CTGGAGGCAG ACAGGGCGNT  
CCTGCAGGCC CTCTCGAGA AGGAGGACGA GAGCCAGCGC CTCCACCTGG CCAGGCGGGA GCAGGTCATG GCGATNTGG  
CCTGNTGAA GCAGGCCATT NAGGNGCAGC TTCAGCTGGA GCGGCGCGG GAGGCAGAGC TGCAGATGCT TCTTGAGGGA  
GGAGGGCCAA GGAGAT

SEQ ID NO:2340: (Length of Sequence = 290 Nucleotides)

TTTTAGTAGA GATGGGGT TCTCTTGT GGTGAGCTG GTCTGAACT CCGACCTCA GGTGATCCAC CTGCCTGGC  
CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CACNCGCNC CGGCTTCAG TTTCTTCTTA GGCGTTCG TCACCAAAAT  
AGCTGCTACC CAGAGNGGCG GGGTTCAGCT AGGCTGAATA TCCACTTGT TTTTATGGAT GGCTNCCTTC CCCATTGCGN  
CTTINCCAGA ATATCTTTC AAGTINCANT TTCCAGGGG AGCTCTTGGG

SEQ ID NO:2341: (Length of Sequence = 298 Nucleotides)

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TTTTGCTTAT TACCOGATTT ATTAGAGAGA TCTCTAAAAA GACGGGGTGT GGCGGGGGTA GGTGGGCGAG GAACCTGGGA  
 TGCAACCAG TGTITGGGGC CAGGAGTGGC TGTATGTTT CANAGGCGCC CACCACTCTG GGTITGAGGG ACACAGCACC  
 CTCGTCTCGG CGCTTTGGAT TATCAGCAC CAGACCACGG GGCGGAGGAA TGGAGTGGCA TCCCTGGGGG GAGTTAAGAC  
 ACAOGAGGTT TGCAGTTTCA TTTTGTTC GAATCAGTTT GGCCATAAAA ATGGGACT

SEQ ID NO:2342: (Length of Sequence = 316 Nucleotides)

CCTGAACAAG GTCGTGGTGG TGTGGAATTC TCCCAAGCTG CCATCAGAGG ACCTTCTGTG GCCTGACATT GGCGTCCCCA  
 TCATGGTGGT CCGTACTGAG AAGAACAGTT TNAACAACCG ATTCTTACCC TGGAAATGAAA TTGAGACAGA GGCCATCCTG  
 TCCATGTATG ACGATGCTCA CTTCCGCCAT GAGGAAATCA TGTITGGGTT CCGGGTGTGG AGAGAAGCTC GGGACCNAT  
 CGTGGGCCTC CTTGNCGTT ACCACGCATG GGACATCCCC CATCAGTCTT GGTCTACAA CTCCAACCTAC TCCTGT

SEQ ID NO:2343: (Length of Sequence = 380 Nucleotides)

GGAAGAGGAG GAAGGTGGA CCTTCATCAG ACCACTCCCT TCCCCATCC TCCAGGAGAG GGGGCAAGGG CAACCCACCA  
 TCTACCACT TACTAACCTG GTCTAACCC CTTACTGTG CGCGTGTGTG TCGTGTGCG CACGCTCTGG CTGTTTGTCT  
 ATATGTCTAG CTCATCTAGT TCTCTTCTT AAGGGGATGG GGGTCAGGGG CTAGGGGAGG GGGCTGAGTT TCCCCACTTT  
 AGGAGGAGGT GGGGGCTATT TCTATGCAA TAGAAATCAG CACATTCCTC CTACTTCCCT TTCTCCACT CCCCCATAT  
 CTTTAAAGTG TGAAGCAGA AAAGGACCTG CATTTTCTCT ACAATTGAGG AGCTGACATA

SEQ ID NO:2344: (Length of Sequence = 282 Nucleotides)

GGGAATATAT TTATGCAAT TTTATTGAAA TTTATTGTAA ATAAAGNTTT TNCAGTGEN CTAGAAAANC AGCTTGAATG  
 NCATTCAGCA TTTATTGAAG AAGGATGACA TCCCTNCCAC TTATGACA AACTTGGTAG CTTTGAGACA AATACAGTAG  
 CACAGTCCGT TTGAAGATTT GTCCAAAAA TTAGTCCATA TTTTAGTGGC TCAGTGTCAA GNGTTCCCTC CCTGTGCCCC  
 CACTGTTGCT TCTGCAGTGA TACGAAGGAT GAATGCTTAA TT

SEQ ID NO:2345: (Length of Sequence = 256 Nucleotides)

CTTTATAGGA AGCTGCAAAA GAAATGAGCA GAGCGNGATA TTTGTGGTAA GGGATACAAA GAACATACAA TTGTGTACTT  
 GAGAGGTTTC ATGGAACATT ATGACCCATC CAATGNAGAC ATCAACATTA ACAACAAAA TTANTGAGG AAGAGCAGTA  
 TGAAATATT CTAATGCAGT GCTGTCCAAC AGAACTTTCT GTGGTGATGG AAATGTTCCA TATCTTTGTG CTAATACAGA  
 ATCTACCAGC CACATG

SEQ ID NO:2346: (Length of Sequence = 437 Nucleotides)

GTGGAGATTG ATGCTTCINT TTTTGTGTC CGCTGCTGCC CTCGCGCTGG GAGCCGAGCC GGAGGGAAGG CGGTGGAGAG  
 ATGATGTCAG AGTGGGTGAG CAGCGCTCTG GGGCTGCGCT TGTATCTCAA CACCCTGAGT GGGGATTTCT GCTATGATGA  
 CAGCGTGTCT ATCAAGACTA ATCAGGACCT TCTCCAGAA ACTCCATGGA CGCACATTTT CTACAATNAT TTTTGGGGGA  
 CTCCTCTAAC CCACAGTGGC AGCCACAAGT CCTACCGGCC ACTCTGCACT CTTCTTTTTC GCTGAACCA TGCCATTGGA  
 GGGTGAATC CCTGGGAGCT ACCATCTTGT CAATGTCTG TTGCAATGCA GCAGTCACTG GTCTCTTCAC AAAGCTTCTN  
 CAAGATCCTC CTTTGGTGAT TGGATACTGG ACATTCA

SEQ ID NO:2347: (Length of Sequence = 406 Nucleotides)

CCCGCGCGCC GCTTTCGCC GGGGCGAGAC CCCCAGGTTT AAAATGAGCC TGTITGGAAC AACCTCAGGT TTTGGAACCA  
 GTGGGACCAG CATGTTTGGC AGTGCAACTA CAGACAATCA CAATCCCATG AAGGATATTG AAGTAACATC ATCTCTGAT  
 GATAGCATTG GTGTCTGTG TTTTAGCCCA CCAACCTTGC CGGGGAACCT TCTTATTGCA GGATCATGGG CTAATGATGT

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TGCTGCTGG GAAGTTCAAG ACAGTGGACA GACCATTCCA AAAGCCCAGC AGATGCACAC TGGGCCTGTG CTTGATGTCT  
GCTGGAGTTA CGATGGGAGC AAAGTGTTTA CGGCATCGTG TGATAAACT GCCAAAATGT GGGGACCTCA GCAGTAACCA  
AGCGAT

SEQ ID NO:2348: (Length of Sequence = 363 Nucleotides)

GGCCTTTCAA GNAGCGGCGG ANTTGCGCGA CCGCTGTAAG GAGGTACAGC AGATCCGCGA CCAGCACCCC AGCAAAATCC  
CGGTGATCAT CGAGCGCTAC AAGGGTGAGA AGCAGCTGCC CGTCTGGAC AAGACCAAGT TTTTGGTCCC GGACCATGTC  
AACATGAGCN AGTTGGTCAA GATCATCCGG CGCCGTCTGC AGCTGAACCC CACGCAGGCC TTCTTCTTGC TGGTGAACCA  
GCACAGCATG GTGAGTNTNT CCACGCCCAT CGCGGACATC TACGAGCAGG AGAAAGACGA GGACGGCTTC CTCTATATGG  
TCTACGGCTC CCAGGAAACC TTCGGCTTTC TGAGNCAGCA GTA

SEQ ID NO:2349: (Length of Sequence = 332 Nucleotides)

TCTCTACT GATGTCTTTC AGTAGATTCA GAAGTGATTG TGGCAAACAT AGTATCTTGA AGGAAGAGAT CGTGTTTTGA  
TTAGCATCTC CCGAGCCTAG TTTTGTGTTT ATGTTTCATGG TATTGAGGAA ATAAAGATCA ATTTGGACTT CTTGCACCTG  
TTAATACATC CTAGTTCCTG ACTGCAGCAA AATGACTCTC AGTGCCCTT TCTCTCTTA GTGATTGCCT AAGATGACAG  
CTTCATTCCC TTTTAATTAT TATCCACCTT CTTCCCCATC TTCANITGTT TTCTCAAGTG AGGGACTTGG CCTCTACTGG  
GACTCCACTG GG

SEQ ID NO:2350: (Length of Sequence = 339 Nucleotides)

GAGATGGAGT CTCACCCCTT CGCCAGGCT GGAGTGCAAT GGCACGATCT CAGCTCACTG CAACCTCTTC CTCACAGGTT  
CAAGCAATTC TCTGCCTCA GCCTCCCGAG TAGCTGAGAC TACAGGCGTG TGCCACCATG ACCGGCCAAT TTTTGTACT  
TTTAGTAGAG ACAGGGTTTC ACCATGTTGG CCAGGCTCGC CCCGAATCC CGACCTCATG ATCCACCTG CTGCGCTCC  
CAAAGTGCCG GGACCACAGG CATGAGNCAC CGCACCAGA AAAAGCAAAT CTCTTAGTAT TTTTCTCTT GTCCAAAAGG  
TTCTGACCAT GTTCATGAC

SEQ ID NO:2351: (Length of Sequence = 354 Nucleotides)

AGAAGGACCT GAGTTGTGGC CAACAACAGG CTGCAGAAAG GCAATGCCAT CCTGAAGATT TCTCAACTAA GAGTCTGCAC  
CCATGACAGC CCACCGAGAC CCTCGCTCCA AGTTTGTGGA GAAAGGGAAC CCGCTTGGCA GCATGTGGAA AGACCCACG  
ATGAGCAGCA GACACAGCAA CGCTGCCTCC TACATCTCGA CAGCATCTGT GTAAGACTCG CTAGCATCTG GTGCACACAC  
TGTATGAGAC AGCAACAGCC AGAACAGACA GCTTTACGTT GATGAACACA CAGACGGTGG CGCATGTTCA GAGATGCCGA  
GGGGACGCCG CAGTTCCCAA AATCACCTCT GGCC

SEQ ID NO:2352: (Length of Sequence = 378 Nucleotides)

GTGTTTGTGTT TAGTGGAACA CTCAAATCAA AAACAGGCTC ACGGTCTGAA TAGTCTTCTG GTCTAAGCAA CTCAGCACCA  
GCGCCGCCAA GGGGAGGCCG CCCTTGTCTT GGCCCCGGA AGAGACGCAG CTCCAGCCCC GACGCAGACC CCATGGCGCA  
CACAGGCAGG CAGAGCTCGA GGTNCAGGCG GCTGCCTTGC GGAAGTCCG TGGGGGAGGG TCCCTNGCTG AGGCTGCACC  
AAGGGCTNGG GAGAGGCCCA GGAAGGGGAG AGCGAGCTGN GAGCTTGGGA TGGGAGCCGT GAGGTGGGGA TGGTTNGCA  
GAGGGGCAGA GCCAAGGNC AAGGCAAGTT CTNGGGCCCC ACAAGCTTAT GGTGCGCA

SEQ ID NO:2353: (Length of Sequence = 369 Nucleotides)

CTGCCTTATA TAATGTGGAT GCTGGGCACA GAGCTGTCTT CTTTGACCGA TTCCGTGGAG TGCAGGACAT TGTGGTAGGG  
GAAGGGACTC ATTTTCTCAT CCGTGGGTA CAGAAACCAA TTATCTTTGA CTGCCGTTCT CGACCACGTA ATGTGCCAGT



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CATCATTTGGT AGCAAAGATT TACAGAATGT CAACATCACA CTGCGCATCC TCITCCGGCC TGTCGCCAGC CAGCTTCCTC  
GCATCTTCAC CAGCATCGGA GAGGACTATG ATGAGCGTGT GCTGCCGTCC ATCACAACCTG AGATCCTCAA GTCAGTGGTG  
GCTCGCTTTG ATNCTGGAGA ACTAATCACC CAGAGAGAGC TGGTCTTCA

SEQ ID NO:2354: (Length of Sequence = 363 Nucleotides)

GGAGAGGGAT TGGCATCGGC ACCATGGAGC TCCCAGGGCT TAGAGATGGA GCAAAGTTGG CCTCACCTTG GGGAAACCATT  
CCTGCTCCTG GATACTGGAA GACATTCTGC TGCATCINAG GATTGATTCC AGTGCCAAAC TGTCCTCCTA TGTTTCTGT  
CATGCTCTG CTCACCATGC TGTTCGGTT GGCCAAGGAT GCTTCAGGAT TTNCTGCTAG TTGTGAAAAC GGGCTGGTAG  
AAGCAGGTGG GGTTCCTGGG ATTTGTACCA TAGTTTNGTG GATAGGGGAA TTGCTGTGGA GCACCTTGAG GAAGACGGGG  
GTINCCCAT TNACTGGTA GTCCAGATGA GGGAGGGAGG GTT

SEQ ID NO:2355: (Length of Sequence = 403 Nucleotides)

AACCAGGAAT GGAGGGCCTC CTCATGTCTG AGGTAGAGTA AGACGGTGTG AGGGGGCGGA CCGGGGGGCG GAGATGAGCA  
CCGGCCGCAC TGGGGCATCA TCNNGGCCA CCGGGACGA TGGGCGTGG GAGGGCTCAG GGCGGTGTGG TGGCCACACT  
GCGAAGAATG GATTTTTAAA ACATTCATA GCCCCANIT TMTTCAGCT CCTCTCTGT GGACACAAC TCAGGGCTCC  
CTGTCACTG GCTTTCGGGG GTGGTCTCCC CACTTCAGA GTCTGGTCTC CACAGGACAC CGTCTTCCC TTCCCTTCCA  
AGGGGCAGGN CCCACGNACC CTCGCCCAA AANTAAAGGA GCTTTGTGT TGAACGCC AAGGCAAGCC GTCCAAGGA  
GCT

SEQ ID NO:2356: (Length of Sequence = 456 Nucleotides)

GAAAGAAAA CAATTGGTCA AACCACAAGA ACCTGTTAC CITGAGCCTG AGAAGCCAAT TCAGATTCAA CCCTGAATTT  
GGTIGATTG GATTAAAGTA CGCAAAAGT CAATAGAACC ATTGANITTC AGAAATCATA AAGTTGCACT ATGCCAAGA  
AAAGAGTACA TGTGAATCAA GCGTAGATAG AAAACATCAA GCCAAGAAAA CAACACANTT CACATAATTT TMTTGGCCCC  
GACAAAACAT TTAAGCAGTT AATTTGTTT TGTTTGTIT TGTTTGTIT TGAAGAACAN TTGTGGTCTT TTACATTTTC  
TTGGTGGGAG AGCAAATCT GATCAGCATT AGTGTCTGTA AATACTTTTG GNTTATCATC CCCCAAGTNT AGGGTGAGAT  
CATGAGGAAA NTTTTGGCAG TCCTTCTCTC AGATTTNGTT CACTNAAANT GCTTGG

SEQ ID NO:2357: (Length of Sequence = 412 Nucleotides)

CCACCCCATG CCCAACAAGC CATATTGTCA ATAAATAAGG AATAACTGAA ACCAGACCCT TTAGGAAGAG ACAGAAATTC  
CATTACCCAG GAAACCACTC AGTGAAGATG CTGATAGTTC TGATATGTTT TTATGCCCTG CCCCCTTCCC CCAAAAAACC  
ACCTGCAGAA CCAAATGTTT CTCTCAAAG CCCATCAGCA CAGATTGATA ATAATATCAC TATCAAGCCA GGGCTAGTGC  
TTCTCTACAT ACTGTACTGT CACAGGTACA AAGCAAGCCC TGGACAGATA CTGTCTCCCT GCCCCACAA ATCCAGGGAG  
GAAAAAGACC AGGGANGCTT TGATTTCCTT GGGATTTAAA CCTCATGTTT AAAAAGGNTA ATAAAGGTGC TCGTACTTGT  
ATCTTCTTCC CT

SEQ ID NO:2358: (Length of Sequence = 399 Nucleotides)

AGATGGCAGC AGGTTCAGT GGGGCCCCCTT GGATGCCTAA GCCTGGGGAC GACTACAGCT ACAATCAGTT TTCCACATAT  
GGCGATGCCA ATGCCGCTGG TGCTTATTAT CAGGATTATT ACAGTGGTGG CTACTATCCT GCACAGGACC CGGCCCTGGT  
CCCCCCCCAG GAAATGCCCC CAGATGCCTC CTTTCATCAT GACGAAGCAT TTAAGCGGCT GCAGGGCAAG AGGAACCGAG  
GGAGAGAAGA AATCAACTTT GTGGAGATCA AAGGTGATGA CCAGCTCAGT GGGGCCAGC AATGGATGAC TAAGTCATIG  
ACAGAAGAGA AAACCATGAA GTCATTGAGC AAAAAGAAAG GTGAGCAGCC AACAGGCCAG CAGCGGCGGG AAACACCAG

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SEQ ID NO:2359: (Length of Sequence = 352 Nucleotides)

CTTCATTAAAC AAGCTGCGAG AGAAGCTGGG TTGCCAGGAC GCCTTCCCCG AGGTGTACGA CAAGATCTGC AAGGCCGCCA  
GGACTGAGCT GGAGCCCGCC TGGAGAGACA GACACGTGTG AGTGGTCAGG CATCTTCCT TCACTCAAGC TTGGCTGCTT  
TCCTAGATCC ACACTTTCAA AGAGAAACCC CTCAGAACT CCCACCTGA CAGCCCAACA CCACCTTCCT CTTGGCTTCC  
AGGGGGGCGAG CCCAGTGGAA TGGAAAGAAT GTGGGATTG GAGTCAGACA AGCCTGAGTC CAGTTNCCCG TTTAGAACTC  
ATTAGCTGTG TGACTCTGGG TGAGTCCCTT AA

SEQ ID NO:2360: (Length of Sequence = 359 Nucleotides)

TTTTTTTTCAG CATAGTCATC TTAGCTTTAT TGAGTAAGGC ATCCCAATCT CTGCTAAGAT TCINCTAAAT GAACGGCTGA  
TTTCTCTGCC AAACATATGCA TTGGTCAAAG AGAAATCACC ACCTGGCCAC CCCATTCTGT CCCCCTACAG GACACTAAGG  
GTCTTTACAG ATAAAGGGAC GATGCATCA TGCCTGGAGA ACTAATCACA CCGATTCTCT CTGGGATCTA AANTAATGTC  
AAATTTTGAT TCACTTTATG TAAAGAAAAA TCCTTTTNTT TTNTGCAAA CCNCTTTCAA GANCAATGCT GCCCATCCCA  
TGCAAGATGT TGTGTAAAG CCANCTCTG GTATACTAA

SEQ ID NO:2361: (Length of Sequence = 437 Nucleotides)

CTCCAGGATT CCAATCCAGT CCGAACTCAA CACGAGGGGT GGCACCTACA GGCTGGGGTC AATCTGGAAG ACTGCCTGTT  
GTATGGCCTG GCAACTAAAA AATGTTTTT ACATTTTAA ATGGTTAACA AAATTAAAAA AAGAGAATAT TTCATGACAT  
CATCAAATTA CACGAAATGC AAATTTACGC ATCTACAAAT ACAGTTTGAT TGGGACACAG CCACCTCAT CGGTTTCAG  
GCTATCCCTG GCTGCTTACA GGTCCACAT AGTCCATAAA GCCTGAGGAT ATTTACTATC TGGCCTTTTA CAGAAAAAGG  
TCCCAAACA CTAAATCTGA AATGTTTTGC ATCAGAAACC CTGTGGGGC TTGTAGGAA TGCAGCTCCC TGGTCCACA  
NCCAGTCTCT GGATTCAGTA AGTCTGGAGC AGGGCCT

SEQ ID NO:2362: (Length of Sequence = 317 Nucleotides)

CTTCTCTGGA TGTGCTGGG CTGGACTGG CTAGAATCTT TCTCTGACT NTGTCATGTA CAGTGNCTCC ATCCTGGAGG  
CAAGAGAGTT GGGAGTGGCT CGAATCANAG CCGTGCCCAA GATATCCCTN CTGTTGCATC GTTGAAGCT GACGTCCTGT  
GTCTNTACAC TGCTGCCACT GTGTNTCCT CGNTCTGCTT GCTGTGCTT CACGCCAGN CCCGTCCTGC CGTGACANCC  
TTCATCCTAC CTTGGAACC CCAAGGCCAA GTTGGTTCAA ACTGTTGGAG AACAGAGTTG GCCTGCATCT TGAACA

SEQ ID NO:2363: (Length of Sequence = 412 Nucleotides)

GTCAGAGTNT TGATAGTTCT ACTGGGAGAC CACAAAATGA CATGGTCCAT CCTCCTCCTT ATCCAAAGAT GCATGGTTAA  
AATAATATAG ATTAGGAATC ATCGTTACCT CCAAACAGTT AATTCAATC AAATTTTAG CCCAGACTGG TTTTAAAGA  
CATTTTCTGC CAAAATTTT TGAAGTAAA CACATTAAGG GTAGGTGTGG AGAACGATTA ATGGATTCAT TTTTATACTC  
ACATCTGTTT TGGAAATATA TTTTATGCAA TAAAGCATAA ACTAACAGGT ATACTTATAA ATGCTGGTT TTAGAAACAC  
TAAAGATCT CCAATCTTAG GAGGCCTTAA TTTGAAACTC TGCTTTTATT TGCTGAACT AGTGGCTAAC CTGNTAGGC  
ATCTCACGAG GG

SEQ ID NO:2364: (Length of Sequence = 334 Nucleotides)

GAAATGATTT AATATTAGGA AAGGCAAGT CCTCGAGACA TTTATTTAAG CTAATCTGTC CTGATTTT GACTTTCAGA  
TTCATTACAC CCAGCCACAT TAGCCTGCAC CATTAAAAAC ATTGATTCAA CCTCTTTAT TGGCATAGAC AATACATCTG  
CCTTGTTTAC TACTCTATCC TCAGCTTGGT ATTTCTCTAG CACAGAAGAA TGGTCCAGTA GATATGCTGA AGAAATACCT  
GAATGCATAA ATAAATAAGA AAATGAGAGA CTGAATGANT CAATTAATAC CTCAAGTGT ACCCTNGATA AGGTTCTAGA  
GAGGGGAGGT TCTA

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SEQ ID NO:2365: (Length of Sequence = 423 Nucleotides)

TTTTTTGCCA TTAAATAAGT ACTTTATTGA TATTATATCA CACAGCACTT TACAGTATAC TCAAAGATAG CCTAAATTAT  
 GAATTAACA TGCAATATT TNCFTTTCCA AAATGTGGAC AAAATGTCTT TTAGAGTGCT TTTGAACACT AGCCTTAGCT  
 ACTAAGCAIT CATGGGTTTG ATCTTTCTTG CGACATGACT TTAAGTAAAGT TAACAAAAA TGTAGCTGTA GACAGTAATT  
 GTTTGATAAA TATGANCAGT TTTAAAATGG CACTGAATTT ACATCTTTAA TCATTTTAAT AGGGCCATCC ACAGCCTCTC  
 TTGTTCTCTT AATTCTCAAC CTCGGGGGTC TTTAAAGGGC TGGTAAAGGC TCAGAAAGTG NCCAGCTCCA TGTGGGGTCT  
 CTGTAAGNNG TCTATGTCTT CAT

SEQ ID NO:2366: (Length of Sequence = 294 Nucleotides)

CCAGCCATAC ACATGCCTTT ATTTAGATCA GCTTTTTTCA AAATGCAGCC AAACCTATGA GTTGGACAGC CCAAAGTAAC  
 CAGCCCTATT CCACTGAGTT AGTTTACCCC ACAGCAGTAG AACCCAGTGC TGGTTTGGTT CCTGGCCCAT GGTGGGACAG  
 CGTGAAGGTG ATGGAGGGCT CTAGCACAAG GAGGTGCTGA GTGCCACCGG CAGGTGCTTC TGCAGACAGC CTAGAGCAAG  
 GTAAGCAGGA GCACTCGNTT CAGAACCGAG GCGGCTCGGA CCAGAGGGCA GGCA

SEQ ID NO:2367: (Length of Sequence = 393 Nucleotides)

ACGGACAGAG CGAAGGGGAG AGGATGGTAG TGTCTGACTT CCACGTTTTC GTCAGGGATG TGTTCAGCA TGTGGATTCC  
 ATGCAGAAAG ACTACCCTGG GCTTCCTGTC TCTCTCTGG GCCACTCCAT GGGAGGGGCC ATCGCCATCC TCACGGCCGC  
 AGAGAGGGCG GGCCACTTCG CCGGCATGGT ACTCATTTG CCTCTGGTTC TTGCCAATCC TGAATCTGCA ACAACTTTCA  
 AGGTCTTTGC TGCAGAAAGT CTCAACCTTG TGCTGCCAAA CTINTCCCTC GGGCCCATCG ACTCCAGCGT GCTCTCTCGG  
 AATAAGGACA GAGGTGACA TTTATAACTC AGACCCCTG ATCTTNCGG GGCANGGGCT NAAGGTGTG TTT

SEQ ID NO:2368: (Length of Sequence = 187 Nucleotides)

GATCTTGAAG TTAAACCACT GTTAGAAGTT TTGGTGGGA AGACAATTNA GCAGTCTCTT CTGGANGTAA TGGAAGAAGA  
 AGAGCTGGCT AACCTGGGG CAGTCAGCG TGAGTATGAA GAACTACGGA ATAGTGAACG TCCTGAAGTT CAACGACTTG  
 NAGAGCAAGA NAGGCGACAC CCAGAAG

SEQ ID NO:2369: (Length of Sequence = 341 Nucleotides)

GTATCTTTAG TAGAGGCGGG GTTCCACCAT GTTGGCCAGG CTGGTCTCGT ACTCCTGACC TCAGGTGATC ACCTGCCTCC  
 TCGGCTCCC AAAATGCTGG GATTACAAGC GTGAGCCACC GCGCTGGCA CCATCAGTTT TTGATCCTGA TACTGTCTG  
 TCCTCTTGGT TCTCTCATC CCTAATTTAA CCTTGAACAC AAAATTCAAC AGGTTTGGC ATATAGAATA AAGATTATCA  
 GGCAAAGGCG CACTCTTGAC CTAATGATAT ATCTACATTT CATTTCTGA TCTATCAGCA ATATTTAATT TGTCTAGAAA  
 TGATGAGAAG TTTAGAGGAG G

SEQ ID NO:2370: (Length of Sequence = 337 Nucleotides)

AGATCAAGAT CTCTCCCAA ATGCCAGTAT GCAAAGGACA CTGGGGCAG CTTCTCAACA TTTTCTGCCT GACTGATATG  
 CAGCTGATTT GTGGGATCTG TGCTACTCGT GGGGAGCACA CCAAACATGT CTTCTGTTCT ATTGAAGATG CCTATGCTCA  
 GGAAAGGGAT GCCTTTGAGT CCCTCTTCCA GAGCTTTGAG ACCTGGCGTC GGGGAGATGC TCTTTCTGCG TTGGATACCT  
 TGGAAACTAG TAAGAGGAAA TCCCTACAGT TACTINGACTA AAGATTGAGA TAAAGTGAAG GAATTTTTT GAGGAAGTTA  
 CAACACACAC TTGGATC

SEQ ID NO:2371: (Length of Sequence = 320 Nucleotides)

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CGTGGCCGCA GAGGCAGCTG AGCATGAGGG ATGGAGCGTG CTGCTGTCTT GCAGGTGCCG TTAGCCCTGT TTTGCACTGG  
 TGGATTGATC TGCTCAGGCG CACAGGGAGA TGGCACAGCA GGACCCGCCG CCCAGCCTCG CTGAGGGCAT GCTCCCGCCT  
 CACCTCCAGA GGCTGTTGGG CGGAAGCGAG AGTGCGAGCA GTTGGGGCCA GCNTGGGACT GGAGGCCAG GTGAATCTTG  
 TGGGGCAGGG GACGGAGCTN AGGCTGTCCG GCCCGGGCCC TTCCCACCCA AAGGCCCTAG AACCCTAGGC CTTCAATCCT

SEQ ID NO:2372: (Length of Sequence = 326 Nucleotides)

AGGCCTGGCA TCGGCGGAAA AGTTCCTGGA GAAGGCCTCC CCTCCCCAA AACACCCGAG AAACGTGGGG ACCTCATTAT  
 TGAGTTTGAA GTGATCTTCC CCGAAAGGAT TCCCCAGACA TCAAGAACCG TACTTGAGCA GGTTCTTCCA ATATAGCTAT  
 CTGAGCTCCC CAAGGACTGA CCAGGGACCT TTCCAGAGCT CAAGGATTTC TGGACCTTTC TACCAGTTGT GGACCATGAG  
 AGGGTGGGAG GGCCAGGGA GGGCTTTTGT ACTNCTGAAT GTTTTNCAGA GCATATATTA CAATCTTTCA AAGTCGCACA  
 CTAGGA

SEQ ID NO:2373: (Length of Sequence = 361 Nucleotides)

AGCAGAGCTG AGGGAAGGCG TAGGATGGCT CCAGCTTCCG GTCAGTGGCT ACATGGTCAG TTCCATGATG GCGTTGACGA  
 TGTCACTGTG GTTGTNTCTC AGAGCCCGCA CGGCCTTGGC CCTGGACACA TTGGCCTGCG CCATCACCAG CTCAATGTCA  
 CGCAGTTCCA GCCCCGCTC GTCCACCTCT TCCCTCCTCT CCTCTTCTCT TTCTTGACAC TCCAGCCTCA CCGGGGGCCT  
 GGGTGCTGAC TCAGGGACCA AGGCTGAGGG CTCTGAGGEN ACCTTAAACT TCTCAGCTGC GGCCTTGTGC ACTTGCTGGG  
 ACAAGTCTT CAATCTTGGN CTCGCCAAG ACCACATAAG T

SEQ ID NO:2374: (Length of Sequence = 281 Nucleotides)

TGACTCTAGT CTGGCACTTA TTGATGACAT TGAGAGGCTG AAATATGAAA TTNCAGAGGT GATGACAGAG ATCGACAATC  
 TAACCTCCGT AGAGGAGAGC AAAACGACTC AGAGGNACAA ACAGATAGCC ATGGGAAGAA AGAAATTCAA CATGGNTCCC  
 AAAAAGGGAA TTCAGTTTCT AATAGAAAAT GACCTGCTAC AGAGTTCCCC AGAAGACGTC GCCCAGTTCC TTTATAAAGG  
 AGAAGGCCCT AATAAGACCG TCATTGGGGA CTACCTGNGG T

SEQ ID NO:2375: (Length of Sequence = 391 Nucleotides)

ATGTTTAGTG CTTCTTCAG GAGCTCTGGT AGGGCAGGTC TGGTGGTGAC AAAATCTCTC AGCATTGCTT TGCTGTAAA  
 GGATTTTATT TCTCCTTCAC TTATGAAGCT CAGTTTGGCT GGATATGAAA TTCTGGGTG AAAATCTTT TCTTTAAGAA  
 TGTGGAATAT TGGCCCCAC TCTCTTCTGG CTGTGACAGT TTCTGCTGAA AGATCTGCTG TTAGTCTGAT GGGCTTCCCT  
 TTGTGAGTAA CCCGACCTTT CTCTCTGGCT GCCCTTAACA TTTTTCCTT CATTTCAACT TTGGTGAATC TGACAATTGT  
 GTATCTTGGA GTTGCTGTTC TCGAGGAGGC AACCTTTGTG GCGTCTCTCT GTAATTTCCC CGAATTGAA A

SEQ ID NO:2376: (Length of Sequence = 324 Nucleotides)

CCAGCCCTCC CTCAGCTGGG AACACAGCCA GGTGCCCTCA GACCCCTGNN TCTGCACAAG GGGGGCCTGC CCCCTGCCCC  
 CAGCTATATA CACGACAGCC CATCCTGCTG GCGGTGGACA AAAGCTGGGA GCTCCTGTGC CCAGTCAGGA GCCCCACAG  
 TCCACCAGCT GCGCGGCCGG GTCCAGGGGC CCACTGTGGT GCCAGCNA GTTNTCAAAC CNAGGGCCCA GCCCCAGCTG  
 GCNCTNGCC AAGCCCCAGG CCTGTTTGCT GGGATGGAGC CTCCCACTG AGGCTGGTAA AAGCTTGAAC TCAACAGCAG  
 CAAT

SEQ ID NO:2377: (Length of Sequence = 357 Nucleotides)

GTTTATGTTT TTATTTATGT ATTTAACTG ACTTATTGT GTATCCCACT AGAACAATAC ATTCAATA TACTTGAGA  
 ACTGTGCTG GTGCGTCATG GGAGCAGAGA ACTTGTCCAG TGAATAGTTG TTGAAGAAAG GAGTAAATC TCCCCAAC

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CCTAAAGGCA TCCTTTTCGT AGTGTGTGTC CCATAGGTAT GGCTGCTGAG CACCAGGGCT GCTCACCATG CTCCCAAGAA  
GCAGAGTCAG GGAGGCAGAC AGCAGGGTTT ATTAAGGTGC ACACCCATGT CTGAGCCCCA GCTCTCTCCG NCTTCTGTGG  
GGAGGAAGCC CTCGGTCTT TCCGAGGAAC CTTCAA

SEQ ID NO:2378: (Length of Sequence = 454 Nucleotides)

GACGGGTCTT TCAATAGCAA GTTTTCACTT CATCGACAAC ATCAGGAAGG TGGTAACAAA CAAATGCTTT ATCAGGCTGG  
ACTTCATTTC AAACCTCCCC AAAGCACAGA TCCATTACGC ACATTTAAAG ATACCATCTA CCTTACTCAG GTGATGCAGG  
CCCAGTGTGT CAAAACAGAA ACTGAATTCT ACCGCCGTAG TCGCAGCGAG ATAGTGGATC AGCAAGGGCA CACGATGGGG  
GCACTTTATT GGCAGTTGAA TGACATCTGG CAAGCTCCTT CCTGGGGCTT CTCTTGAGTA CGGAGGGAAA GTGGAAAATG  
CTTCATTACT TTGCTCAGAA TTTCTTTGCT CCACTGTGTC CAGTAGGCTT TTGAGGAATG AAAACACGGT CTATATCTAT  
GGGTGTGTCA GATCTTCACT CGGATTATTC GATGACACTC AGTGTGAGGA GTCC

SEQ ID NO:2379: (Length of Sequence = 224 Nucleotides)

GGAAGAGACC TCACAGGTNA TTAAANGTGT AITTTNTGGA CCTGGGCTTG GCTGGAATGC TCAGGGGTCC TGAAGATCCT  
ATTATAGCTT CCTTCTGTG AACCATTAG AAAAGATGGC GANAGTCAAC ATAAC TAGAG ACCTCATCCG TAGNAGATCA  
AGGAGCGGGG TGCCCTTAGC TTINAGCGGC GCTACCATGT CACTGTCGCC TTTATCCGGC GGCT

SEQ ID NO:2380: (Length of Sequence = 274 Nucleotides)

AGGTTTGAAA TATCTTTTTC CAATAGATAA TCTTATTTAC ATTAATACAG AATCATTTTA CATTCCTAAA TCAGACACTA  
ATAGATGCTT TATTTTAGTG AATTATAAAG GAAAACAAA AGGAACTGT TGAGAAGTGT TCTTCATTAA CCNGTCTAAC  
GNCAGCCCGA AGATCCNGNA ACACATGGAA ACTGCGNCAT GCINCCNGCA GAGGCTGGGG AATGGGGGTT CTGCTCTCAC  
TGAATGGTGG GGAACCTTCA ACTGCTTAGC CTGT

SEQ ID NO:2381: (Length of Sequence = 312 Nucleotides)

GCACAAACAG TTTTATTTGA TGANCCACAG TGAATAACAG GNTCAGAAGA CAGTGCAGAT ATTCTGAAGA AGGCACTGNG  
GGAGGTAAGG GGGTATCACA GCAGGCAGCC TCTCTGNTT CTNTCCAGT TCACAGATGA GTTCCAGGCA GGAAGTCTCT  
GCAGGTCACC CACGGCGGCC TCAGAGGGAC AATTINTTCC CTCTTAGAAG CTINTTCCAG TGTTCACTGG ATGNTTTGAG  
GACAGNTCTG GGCAGAGGAG GTGACTCTGT GAAAGATGCT ATCTTAAGAT GGGGAGACTA GGCTGTGAGG AG

SEQ ID NO:2382: (Length of Sequence = 402 Nucleotides)

CTTAAACTAA CTTTGAAGCA AGTAATGTCA ACTTTGAGCA CTTTGTGAG TTTTGAAAAA TCTTATTTGT TGCTGCACAG  
GTTAATAAAT TATCAATTIG TAATTCAGCA TGTGTTGTCAG AGACACGGTC ACTGATTCAC ACCCAGTCCC TGCCACAGAC  
CGTCTCAGAC ACGCACAGTG GGCTGCTGC ATGATTACA CCCAGTCCCT GCCACAGACC GTCTCAGACA CGCACAGTGG  
GCCTGCTGCA TGCGTGTAC CTGGCTTTTG GCTCCAGCT CACTCATAGC CATGTCCACA TGGGGGGCTT GCACACAGGA  
TCACTCATAT ATGTACATGT ACCCACCACA AACGTGCAA GCTCCTTGCA CACATGCATG CACACAAACG TGGTACACAA  
GT

SEQ ID NO:2383: (Length of Sequence = 406 Nucleotides)

GACCCTTTTT ACTTAGCCCT CTTGGGTTTG CAACATGCTT TCTCTCTCAC CTTCTCATTG AATGAGAAAA AACAGCCCAG  
CCATTTTTTT CAAACAGCAA AGCACCAGAG TGATGATGGC TTTGCTCATC TCACTTGAAT TTCACAGTAA CTCAGTTTGA  
TGTAGGCAGT CCAGGCATTA TTATTTTCAT TTTACAGATG ATGCAACTGA GGCTCAGTGT GGTGAAACAT TTGGCTCATA  
GCCACACAGC TGATAAGCAT CAGGACTTGG GGACCTAGGN CTTACATTTT CAAGTCAGCT GTATCTGTCC CCAAGCCCCA

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CCAGACTTCA TGTAAGGTG GCTGCTTCTG GGGTGATGGT GGCTGGAGAG GCAGACTTTG AGGCTGCCAT GCTCTTATTT  
TCAGAT

SEQ ID NO:2384: (Length of Sequence = 165 Nucleotides)

TTAAGACAAT AATGAAAGAT TCTGTACAAA GTTACCAAGT CTACAGGCTG AGCGAGCCAA GGGTAAGTGG GGCCTGATCC  
TTGTGGACGA ATGTCNCCCG GAGAGCTGGC CTCACCTGGG GGAGGCACGT TGAAAAAGTA CACATTTACA GGGCTCGGGA  
AAGGC

SEQ ID NO:2385: (Length of Sequence = 297 Nucleotides)

GGTTTTNATT CATTCTCTTC TATTAACTTC TCTAAAGGAA ATTGGGCACC TGTAAATCCCA GCACTTTGGG AGGCTGAGGT  
GGGTGGGTCA CTTTNAGGTC AGGAGTTCAA GACCAACCTG GCCAGCATGG TGAAAACCCA TCTCTACTAA AAATACAAAA  
NTTAGCCAGG CTGGTGGTGT TCGCTGTAA TCCCAGCTAC TCAGGAGGCT GAGGCAGGAG AATTGTTTGA ACCTGGGAGG  
CGGNGGTTC AGTGAGCTGA GATCGTGCCA CTGCATTCCA GCCAGGGTG ACAGAGT

SEQ ID NO:2386: (Length of Sequence = 290 Nucleotides)

AAAAAATAAA GTGAATTTAT TGGTTCATGT AACTGGAAAG TCTCATGAAA ATGTCAGCTT CAGGAGAAGC TTGACCCAGC  
AGCTTCATGA TGTATGGAAA TACCTGGGTT TTTGTTTCT NCTCTGCTAC TGTGGTATCA GCTTTATTCC AAGTCTGGCT  
TCCTTTGTTG TTGCAAAATG CTTTGTGAGA AGAAGCCTGG GTCCATCTGT TAGGNTTAAG TTTACTCTGT ATGCTGTAGT  
AGTGGCTATG ACAAGATTAG GAAGTGTATT TTCTCTCCC ATATTAAAG

SEQ ID NO:2387: (Length of Sequence = 356 Nucleotides)

GTCATCTGTA TGTACATG AAATGCACAT CCAAAACGGG TGACTTGGAA ACGACCTATT AGGTCACACG GAGTCCGGCC  
CCTGGGGGCA AAGCCTCATC GATGCCACG GCGGTGGCC AGCACTTTC TTGGGCTGTG GCGTGTGCAC CCGCCTCCC  
CAGCGGAGAG TCAGCTCACA CCCCAGGCCC TTTAGCTCTC TGGCAGCAGC TCCCAAAACG CACTTGAGGA ACCAATAATT  
CCTTGGGGGT TAATAGCTGT TCCCCAAGAA AAGGGTCTG TGGTCAAAT AAGTTTAGGA AAACATGGGT TAAAGAAGGT  
TTAGGCAAGA AGCTTTTCTA TAGGGCTTGT TCAGAG

SEQ ID NO:2388: (Length of Sequence = 226 Nucleotides)

ATTATTGGTA TAAAACTTA AGACGGCATT AGAATCTTA AGAAAAGGTG TAAAATTTAA AAAGATGTGC AAACAACAA  
GAATGCCCGA CCTGAACCA GACCTAAGC ACCTCCANT TCCTCCACAC ATCATGCCCC AACACCATCC AGCCCAATCG  
GACACCAGGA CAGTGAGGA CCGGTGGCTG TTCAGTGGC AACAGATCTG GAAGGAAAGA TTTTCA

SEQ ID NO:2389: (Length of Sequence = 250 Nucleotides)

CCCAGCTAGG CCTTGGNATG GCINCACTGA GGAGAAATCC CGGGAAGTGT ATTGAACAAA AGATTCTNAT TGCATTGTA  
TTTTTNTATT AAGTTTGCA TGGTTTCTAA TAAAGGATTC AAACATAAGT TTGTAGTGAA ATGGCCTGNN AGATTCCAAG  
GGCTTCTCIN GAAGGGGGAT TENGCTGCAN TGTAGATTIN CCTCTGAAGG AGGCTGGCCC CAACTTGGN CCTCTCATG  
ACCCCTCCT

SEQ ID NO:2390: (Length of Sequence = 371 Nucleotides)

CCTTTTCTG GAGAACGGGG TCTCGCTATA TGGCCAGGC AGGTCTCGAA CTCTGGGCT CAAGCTATCC TCCCGCCTCT  
NAGCCTCCGT TTCCAGAAGG TCACCAAGTA ATATCTGCTT TTCATCAGTT GCAGTTAAGA TTTTNNTTTC TTGAAATACT  
GGTTTTCAA CAGATCAGAA TTACCTGGGG AGCTTGTTTA AAATATAAAT GCCCAAGGC CAGCTCCAGG ACATTCTGAC

TCCATAGGTA TGTGGTAAGC CCAGGGAATC CAGGTAAGCT CAGGTAAGCC CAGGTAAGC CAGGGAATTG TTAACAGGAA  
GCTGGTGGGT TTCTGGCACC TNGACANCGA CTGAATTCTA GGTAGCTTGC C

SEQ ID NO:2391: (Length of Sequence = 200 Nucleotides)

CAGTTCAGCA GGCTATGAAA TTGTGTGGGC ATATAAANAA CTGGAACITTT CAACAGGGTG GTTTTGAAAC TAGNGCATT  
ACCAATAAAT GNCAACCCA CAAGGACAGT GCATTGTGTC ACATAGANGA TCTGGAAAGT ACAGCTGTAA ACTATAATCN  
CCAGTCTCTG AGTTAGCACC TTCCACGNT AGTCTCTTAC

SEQ ID NO:2392: (Length of Sequence = 234 Nucleotides)

TGCCTGAGGT GTTTGGTTTG GAATAGGGAA AAAGGTAAGA GACTAACGTG GAAAGGTGCT AACTCAGAGA CTGGAGATT  
TAGTTTACAG CTGACTTTC CAGATCTTCT ATGTGACACA ATGCACTGTC CTGTGGGTT TGTCAITTTAT TGGTTAATNC  
TCTAGTTTCA AAACCACCT GTTGAAAGT CCAGNTATTT ATATGCCCAA CAAATTTTCAT AGCCTGCTGA ACTG

SEQ ID NO:2393: (Length of Sequence = 337 Nucleotides)

TCCAGAGGCG GATTGAGAAG AAAGGAGATC CACATGAAAT GAAGATCACC TCTGCCTATC TACAGGACAT TGAGAATGCC  
TATAAGAAAA CCTTCTCCC TGAGATGAGT GAAAAATGTG AGGNTTTACA GTATTCTGCA AGGGAAGCTC AAGATTCAAA  
AAAGGTGGTA GAGGACATTG AATACCTGAA GTTCGATAAA GGGCGGTGGC TCAAGCAGGA CAATCGCACT TTATACCACC  
TGCGATTACT GGTTCAGGAT AAGTTTGAGG TGCTGAATTA CACAAGCATT CCTATCTTTN TNCGGAGT CACCATTGGA  
GCTCATCAGA CTGACCG

SEQ ID NO:2394: (Length of Sequence = 211 Nucleotides)

CAAATGTTTA TTTTATATAC AAAGAATTAT CATGGTTTN CATGAGTAG ATGCCCCGGA TAATCCTCTG AAGGAAGAGC  
ATTTAGTCCA ACTTAATGAA ACCGATATCC TTGCGTACT GACGGAAACA CTGGCGGCAC ATATTGAGGC CATATTTCCG  
GATCANACCG TGCCGGTTTG AACAGACAG ACAAGAGCGA GAACCTGCG C

SEQ ID NO:2395: (Length of Sequence = 335 Nucleotides)

CTGAAAGCTG TAACACCCTC AGGTAATAAC AAAAGGGATT TTTATTTTAC AGCTAAAGGG AAAATAGGTG GAGAAGTTAA  
AAAATAATGT CTGATCCTGT TCCTAAGTTC CAACTATAG CCAACACTCT GATGCTGCTC TTTTCTTGT AGGACCAACC  
GTCCAGTTT GCCTGGGACT TTCTATTTT TACAGAGTCC CAAATCCTAG GAACTGGAG CAACTGGTAC AACTGGTCAC  
CTACTCTTGC CCTCTGGTA AATCAAGNCA ACTGTGACCA TCCAATGTGC CATCTTACAG GGNAAAGTTA TAACCCACTA  
TTCCCTATA ACATA

SEQ ID NO:2396: (Length of Sequence = 223 Nucleotides)

AGGGAGATCC AGCTCCGTCC TGCTGCAGC AGCACAACCC TGACACCCA CCATGGATGT CTTCAAGAAG GGCTTCTCCA  
TGCCTAAGGA GGGNGTGGTG GGTGCGGTGG AAAAGACCAA GCAGGGGGTG ACGGAAGCAG CTGAGAAGAC CAAGGAGGGG  
GTCATGTATG TGGGATTACA TTTTTTTTTT AAAGAAAGAA TAAATTAATT GTGATTAAAG TTG

SEQ ID NO:2397: (Length of Sequence = 379 Nucleotides)

CCATTACAAA GAATGTGGCA ACTTGCTTNT NCCTAAAAGG AGGAATTGGA ACTAGAATGT GTGACTCTGT GGGGACTGCA  
TAGGTTTGTT AATTGACCTA TAGCTAAACC TTAATGTGTT TGTGTGCTA TACATTGCTT TCCGCATTTC AAGACATCCA  
GACGCTATTA CCAACATTTT CCTGTGCATT AACCTCTGCA TGTGAAACT TTAAACAGTT ACTGAACTAT GTAAATATGT

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GAATTTTTTT ATTTAGGTGG ATGCATTTTT NGTCTGTTTA CTGCTCTTCT CAGCTTTATT CAATAAACTT GCATTTTAAAG  
GGTTGTATTG GCAATTTTAA CTTAAATGT GCATCATGAT GGAAGGTGCA GACCTTTTT

SEQ ID NO:2398: (Length of Sequence = 421 Nucleotides)

GACAGGTTGG TCTTACCCAC TGGNTCCCAG TCATGCTGTA AACAGGGCTT GCTTTGGAGT CTGTCAGACC TGGCTTAGAC  
CCAGGCTCTG ACCAAATGGG TGAGTTATGC AGCTACTTGG TGGCATCTAA TACCCATATG CAAAGGACTG CCGTGAACAG  
GAAGGAGGTG TCAAATTTGG CAGTGCCTGA TGAGGTGAGG CCAGGACCCA GGAACCTCTA TTCCCTCCCA TGCTCAGGAA  
CAGTAAGTGT TCTTCTATCT GCAGAGGTAG ATGCTTAGCA CATCGTGGGT ACTTCACTCA TGATTGCTAA AATTTGAATT  
TGTGGATAAA GTCATTTCAA AAGTCAGATT CTAGGACCAA AAATAACAATA TCTGTCCAAC ATGGAAGTGT TAGATCATGG  
TTTTTCCTTC CAGCCCCAGG A

SEQ ID NO:2399: (Length of Sequence = 392 Nucleotides)

GATAAGCTTG ATATCGAAAG TNCCACAATG GGTCAGCTGT ACCAGGAACA CCATGAAGAA GACTTCTTTC TCTACATTGC  
CTACAGTGAC GAAAGTGTCT ACGGTCTGTN AAGCTGCTGC CCTGAGCTG GAGGGGGGTC TCATTCTACA AAGAGAGAGG  
TGGCCCCCCT TTCTTGACCT CCTCCTCCTT CAAGCTCAAA CACCACCTCC CTTATTCAAG ACCGSCACTT CTTAATGTTT  
GTGGCTTTCT CTCCAGCCTC TCTTAGGAGG GGTAATGGTG GAGTTGGCAT CTTGTAACTC TCCTTCTCC TTTCTTCCCC  
TTTCTCTGCC CGNCTTTCCC ATCCTGCTGT AGACTTCTTG ATTGTCACTC TGTGGTCACA TCCAGTGGAT TG

SEQ ID NO:2400: (Length of Sequence = 366 Nucleotides)

CTGGGGAAGG ACTGGCACAA GTTCTGCCTN AAGTGCGAGC GCTGCAGCAA GACGCTGACG CCGGGGGGCC ACGCCGAGCA  
TGACGGGAAG CCGTTCTGCC ACAAGCCGTG CTACGCCACC CTGTTGGGAC CCAAAGGCGT GAACATCGGG GGC CGGGCT  
CCTACATCTA CGAGAAGCCC CTGGNGGAGG GGCCGCAGGT CACCGGCCCC ATCGAGGTCC CCGGGGCCCG AGCAGAGGAG  
CGGAAGGCGA GCNGCCCCC GAAGGCCNCA GCAGAGCCTC CAGTGTACCC ACTTTCACCG GGGAGCCCCA CACGTGCCCG  
CGCTGCAGCA AAGAAGGTGT ACTTCGCTTG AGAAGGTGAC GTCTCT

SEQ ID NO:2401: (Length of Sequence = 385 Nucleotides)

CATCCACCCA GGGATTAGGG TTCAAGTAGC AGCTGCTAAC CCTTGACCA GCCCTGTGG GACTCCCAAC ACAAGACAAA  
GCTCAGGATG CTGGTGATGC TAGGAAGATG TCCCTCCCT CACTGCCCCA CATTCTCCA GTGGCTCTAC CAGCCTCACC  
CATCAAACCA GTGAATTCT CAATCTTGCC TCACAGTGAC TGCAGCGCCA AGCGGNCATC CACCAAGCAT CAAGTTGGAG  
AAAAGGGAAC CCAAGCAGTA GAGAGCGATA TTGGAGTCTT TTGTTTCATC AAATCTTGA TTTTTTTTTT TCCCTAAGAG  
ATTCTCTTT TAGGGGGAAT GGGAAACGGA CACCTCATAA AGGGTTTCAA AGATCATCAA TTTTT

SEQ ID NO:2402: (Length of Sequence = 392 Nucleotides)

AAAGAACTTG GTATCTCTAT TAAAGTACAT GANCTCCAA GGAAATAGA GCGATTTACT CTCTCCAAT CAGTGCATAT  
TTACAAGAAG CACAGAGTTC AGTATGAAAT GAGAACACTT TACAGATGT TAGAGTTAGA ACATCTAACT GGAAGCACAG  
CAGATGTCTA CTTGGAATAT ATTACGCGAA ACTTACCTGA AGGGGTTGCC ATGGAAGTAA CAAAGACACA ATTAGAACAG  
TTACCAGAAC ACATCAAGGA GCCAATCTGG GAAACACTAT CAGAAGAAA AGAAGAAAGC AAGTCATAAA GCCTTCAGGG  
AGGCCATTTT TGCCTAAATT TTGAAATGAG GGTGGGCCAG ATGAGTATGT TTAAGTGGAG AGTGCTTTCC AG

SEQ ID NO:2403: (Length of Sequence = 179 Nucleotides)



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TCATTAAGTT ATACTCTTGG ATAGGAACAC TGAGGAAAAA TGAAAGATGA GATTGCAAT AGGGATTCTC TAATTCTCAT  
GTAATCIGT TTGTIACCAT TTTTACTTTG TCTTTTGGG ATCTCTTCTT TTTATTAGAT GATATTAAAG GGGATTAAAG  
TTGTATTGTA TGAAATGTC

SEQ ID NO:2404: (Length of Sequence = 399 Nucleotides)

TTCCCAAAGT GGTGTGAACA TTTTACACTC CTACTAACAG TGCATGGGAA GCCAGTTTCT CTATATCCTC TCCAACATTT  
GGTGCTGTCA ATCTTTTAAA ATTMTAGCCA TTTTGTGGT TGTATAGTGT TATCTCATTG CAGTTTTAAT TTGCCGATCC  
CTGAATGTGT GTAGGTGTGT ATATGTATTA TATAATATAT ATATNATNCT TTCACTTATT TTGAAGTAAT TTCAAAGTTT  
CCAGAATAAT ATCAAGAACT CCTGTACTCC CTTGCCGAGA TTCTCCAATT GTAATGTTTT ATTGCATATG CTCCATTGCC  
CATTCTCCTC TCTACTTATA GCTTGCATTA GTGTTTTCTT GGAACCNITA GAGATGAAGG TGGAAAAAAG GATGCGGGT

SEQ ID NO:2405: (Length of Sequence = 404 Nucleotides)

GGAACAGAGT GACCTGACCA CCTAACATC AGCTGCATAC CAGCAGAGCC TGACTGTTCA CACAGGAACT CATCTCCTCA  
GCATGCAGGG GAGCCCTGGA GGACACAATC GCCCAGGCAC CCTCATGGCA GCTGACAGAG CCAAACAAAT GTTTGGACCC  
CAAGTGCTTA CGACCCGGCA CTACGTGGSC TCAGCAGCTG CTTTTCGAGG GACACCAGAG CATGGACAAT TCCAAGGCAG  
TCCTGTGGT GCCTATGGGA CTGCTCAGCC CCCACCTCAC TATGGGCCCA CACAGCCAGC TTATAGTCCT AGTCAGCAGC  
TCAGAGCTCC TTCGGCATTG CCTGCAGTGC AGTTACCTAT CTTCAGCCAC AGCCACAGGC CTATTGCTGT GCATGGGCCA  
TTTT

SEQ ID NO:2406: (Length of Sequence = 280 Nucleotides)

AAGAGAGAAC ATTTTATTG TCTATAATTA GGGTAAACAG TTGGGTAAAA YCTTACTAAA AGAAAGTTAA GGTGTCTTA  
ACACAAGATA TATAATGNCA TAAATYAGTT AATTAAATTT YAATTAAAAM CAGCTGCTTT GGAAATCCAA CATGTATACT  
TCAAATAAT TTACCTAAAT AACTTATGAA AATGGATGTT ATTGTACAAC TCATCTCTCC TTATAAAAGG NGAACAAAGG  
ACATAGGAAA GCTGAAAAGA AGGCTAGATG AAGATACAGG

SEQ ID NO:2407: (Length of Sequence = 350 Nucleotides)

TCCAAGGGCA ATATAATTA CAGTATGCAA AACATACTGA CTGGCTGAGG TAAAACGCAC TGCTCCTGCC TCACTCACC  
ATGAGGGGAA ACACACATAT GCTTTTAAAA ACATCTGGCT TATAAAAAAA CATCCCCTAG AAAGGCCTCC AGAGAGGGGC  
TGIGAGGCTC ACCCTCTGCC GCGCTCAGGA GGACCCGCG GCTCAGCCCT GGCCCTCCA CTGCAGCCAT GGTGGCGGCC  
TCCCCCTACT GCTGCCCAG GGCTCTGTCC AGGTGTCTCT TGATGGTGTG GAGGAAGTCC GTGGTGTICA GGAAGTGCTC  
GTTGAGCTC ACATTGCTGA GGCCGTGAAT

SEQ ID NO:2408: (Length of Sequence = 239 Nucleotides)

ATNGNITGG GGTGCGNAGA AATGGATGTG CGGAAGAAGA AGAAGAAAAA AAATCAGCAG CTGAAAGANC CAGAGGCAGC  
AGGGCCTGTG GGGACAGAGC CCACAGTGA GACACTGGAG CCTCTNGNAG TCCTGTNCCC GTCCACCACC AAGAAGAGGA  
AGAAGCCCAA AGGGAAAGAA ACCTTCGAGC CAGAAGACAA GACAGTGAAG CAGGAACAGA TTAACACTGA GCCTCTAGA

SEQ ID NO:2409: (Length of Sequence = 331 Nucleotides)

TCTCTTCAAG AATTTTCAGAC CAATCGACCG TCTGTCTCT TTAAGGCTTA GGAAGAGCAG TGTGGCTGCC CCTTTAAGGA  
GGCGTTGCAA CAAACCATAT TGGACAGACG ATGGGGGCGA CCCATCGGGA CCCGACGGGC CTCTGACTCC AGCAATACAG  
CGAATCAGCG GCTTTCGGGA ATACATTTTT CGGAAAAGA CTTCTTCTC GGTTTTCTGC TCTGCACAGG TTGAAATTTT

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CCCCAGTTTT TCCTGCAGAT CGGGAGTCGA GCAATGCCTA CCCCCGCCTC CGCACCAGT TGGGCGCTCC CGGATGATGC  
CCTACCCCTT T

SEQ ID NO:2410: (Length of Sequence = 135 Nucleotides)

CTGCAGGACT TGCAGAGAGC GTGCATTCCC AGTGGGCGAA CGGGAATTCG AACGGAGAGA GGGTTATCTT GTGGGGGGCT  
ACCCGTGGAG AGCAAGGCGC CCCAGGGGT TGGNTCGGTG AAATTNAGGT CGCCC

SEQ ID NO:2411: (Length of Sequence = 330 Nucleotides)

ATGCTGCTCG GTTCTCTGT CCCCCAACT TTACCGCGAA GCCCCAGCCT CAGAGTCCCC TCGTTTCTCC TTGGAGGCGC  
TGACGGGTCC AGATACGAG CTGTGGCTTA TTCAGGCCCC TGCAGACTTT GCCCCAGAAT GCTTCAATGG GCGGCATGTG  
CCTCTINTCTG GCTCCCAGAT CGTCAAGGGC AAATTGGCAG GCAAGCGSCA CCGCTATCGG AGTCCTCAGC AGCTGTCCCC  
AAGCTGGAGA AGCGACCTG CTGGCCCCCT CAANGGAGGC AGGAGGTGGA CTCACCTGTG CCTCAGCCCC CCAGGGCACC  
CTAAGGATCC

SEQ ID NO:2412: (Length of Sequence = 583 Nucleotides)

TGCACCGGTG CACCAGGTGC CCGTGTGGAT TGINACAGNN ACGTGGGTTA TGAAGGTAAC CACCTACCGN GTGCACGTGG  
CCNAGCAGCA GGACGTGCAC CTGACTGTA CCGAGTCTCG GCAGCATGAG CTCTCGCCAG ACTCGAACTT GCCCGTGCAG  
CTCCTCACCA TCCGTGTGGC CAGCACCAAC CCTGCTGTGC AGGCCTTTGA CATCTGGCTG AACTCCACTG AGTACGGGGA  
GCTCTGCGAG AAGCTCCGGG CACCCATCG CAGGGCAGCC CATGTGGTCA TCCACCAGAG OCTGGGCGAC CTNTTNNITG  
AGACATTGTC CTCCTGGTA GAGGTCAACC CCGCTACTC AGTGCCAGC AGCCAGGAGC TGGAGGCCTG CATAGGCTTG  
CATGCAGACA CGTGCCAACG TGAAGNTGTT GAAGACCTGC CAGGAGTCAG CCACAGGGGA GTTCCAGCAG TTTTAATTNC  
CGCCCCATGT TGGTGGCTTA ACTTGATNGG GAAAGTGGNT TNGNCAAGCG GCAAGACCCC CTGGGNCCT NAACTTGNT  
TGGCAAACGG GGTNCCTGCA TGG

SEQ ID NO:2413: (Length of Sequence = 203 Nucleotides)

TGTCCTCCC ACCCCCTAGC CATGCAGNGG TGAATNGGGG AACCCAGNN GGGGGCTGAG AAGCTCCAGG CCACCTTNAG  
GGAATCCAG AGGGTCTTTC TACCAGGAAG AAGTGCAGCA GCTGCGTGGC CGCCGAGACC ACGCGGGAGG TGATCTGGTG  
GGACAAACGT TCCGTCTGCT CCCGAGTCAG GAGATCGAGT CTC

SEQ ID NO:2414: (Length of Sequence = 92 Nucleotides)

AAGGGGCAGG ATGGGCTGG GAAGTCCAAC CCCACGCATT TGGGCTCAGC CTTGGACATG GAGGCCTGAC AGCTGTTGTC  
CTTTGGGGAT CC

SEQ ID NO:2415: (Length of Sequence = 401 Nucleotides)

CTTTTCCCTT CTGTGNCCTA AATGCANCAT CTINATACAC GTTGCTTAAC CTAGAANCGT GGCTCCACCG TGAATTCTAA  
TTGGTCCGTG CTATCGAGGC ACTGTCCCTT TAACTGGTCT CGCTCCAGTG GCCCCNACTG CTTTCTTCC TCTTCCAGNA  
ATGGCTCTTC GGGCCCAGAG TTCGAATCTC GCGATCGGGA TGGGGACGGA GTACCGGCCT GGGGTGTCCC AGAGCCCGGA  
CTGAGCTGGG GAGTCAAGAC CTCGGGCGAT GAGGGCTGAG CAAGTCGGAG TCGTAGGTCC AGTCTTCCC CAGCTTCTCC  
TGTCTCCAAT CTGTTGGGTT CTGGGGTTC TTGCTCTCC AGCGGGGTGG AGCTGCTGGT GGAAGAGTCC TCCCCGGATC  
C

SEQ ID NO:2416: (Length of Sequence = 245 Nucleotides)

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ATGTAATACA GTGTAGAAAG CGATCATGTC ATAAGCAATG ATTCTGTACA ATCATNCNGC AGAAAATTAG TTTTGGAGAA  
 TTCTTGTA TGAAGACCA GCAGAGCACC CCTCCCCACC CGCCCCCTAA AAGTGCTTAC AATTTACAGG GATYCTTTTC  
 TTTTTCAAAG ACCCAAAGAY ACGTGGTCAG AAAAMAAAAG CTTGAAGTCT CAATGCCTAA TGTCGTGCAC ATTKNACAGG  
 GACGC

SEQ ID NO:2417: (Length of Sequence = 384 Nucleotides)

GGTTTTCGCA GATGATGGAA CATCCCATAA GCCCAGGTGT GCAGCTAACC TTTAGAAGCT GGAAAAGGCA AGGAAACATA  
 TTCTGTAGAG CCTCCAGAAG GAACACACGT CTGCACACAC TTTGTTTTTA GCTCAGTGAA ACTGATTTTG GACTACTGAC  
 CTTCAGAAGT GTAAGATAAA TTCTGTGTGT TTTACGTTTG TGGTGTATA GAAGTTACAG AAATGAATAT ACTTACCGTA  
 GTTTAGAGAG AGATGGGAGG ATACTTTTTT TTCTCCCTTC TTTTGAAGG GAGGTAGGTC TCCTTAACTC CAGAGGAAAG  
 ACTTGTCTTT CTCATATAG GGGCCCTTTG ATTCTTAATT CATGGGAGTT GTTTAGGAGA TTGA

SEQ ID NO:2418: (Length of Sequence = 1645 Nucleotides)

GTGATGGCTG CCTGAGGGG GACCATCATG TCGGAGACCG CATGGGTGCA GGTCTCACC CACAGCCCAT GCCCAGCCTC  
 CTGCAGACTC AGGTCATCCA GCTGGTCGAT GGCTCTTTC ATACCTGGTG CCTTCTCTC TCGGCTTGG CAGGCTTCTC  
 TGGGGGCTTC TCAGATGACT CTTTGGCTT CTTCTCTGTC TTGGCTAACT CCTTGGCCAG CTCGAAAGT GCCTCCTTGG  
 CTCCTCTTC TACCACCTCC TCCCGTTTG CCAACTTGCT CACGGCCGTC TTGGTAGTGG CTTTGAGGCT CTCCTTGCTA  
 TCAGCCGCT GTTTGATTTT GCTGGGCTTG AGGTGGTAG GCACAGCCCC AGAAGCCAGG NCCTTCTGCG TGCCACAGG  
 GTAACGAGG AAGTCCAGAT GCGAAGCTT TTCTAGGCCC TCCAAGATCT TGTTTTGGG AGCATTTCTT GGAAAAAGCA  
 CACGCACAAT CTTCTCAGTG GGATTGGCTG GTAGCCAGAC CACCAGAGCA GTGATAGAGG TAAGGTAGGG CACGGAGATC  
 TCAGCCTCCT TCCCATGGG CAGCACGATG CTTGNTTGG CTTTACTATT GCCTGCCAC TTTTGCATGA GGAAGTGCAT  
 CTCCTTCTG TCCTTGACAG GGTGAGGAC ATACATGTCC AGCCGGCCCA CACCCATTTT GTGGAAGAGG GTCAGTGGCT  
 CAATGGTATT GCTGACCACA CGATATAGAG GCTCAGCCTG GATGCCAGG CGGTTTAAGT GCTGCAGAGT GAGGCAGGCC  
 TCCTCAATGC TACGCTTGGC TTTCCGGGAG GCATCAGGAA GCGCAGCTT CTCAGGCAGG TTGAAAAAGA CAACTCCAAG  
 CTCAGGANAG ATAAGGTTCT TCACCCAGTC GCTGTAACTG CTAGAGCCCT GGNACTGCTC CTCCTCTAGC TCTGCCACTT  
 TGGCTGCGAG TAGTCCATTG ATGCCCTGCA GGTGTCTGC CCAATGTGT GTNAGTAGCA CCGAGTCAAT GCGGTCCAAG  
 TNCCTACCA GCTTCCAAA ACAGGACTTG CGATCAGAGC CACCATCCAC CAGGATGTTG AAACCATTGA CAGCAAAGAG  
 GGCAGAGTCC CCACGACCAC CTGGGAAGAT GTAGCAACAA GCGTTGGAGA GCTTGAGGAA GCCCCCTGAG GTGGGGGGCT  
 CTAGTAGGTC AAATGGGGAT GGCACGTCCA CAGTCTCAGA GACATACTCG GAGAACTCAG CCACGCCGTC CATGGTGGGC  
 AGAGTGGGCT CAGGGTTTAG CCGGAGGTGC AGGGTCTCTT GGGAACTGGA TAATCCAGG TGGCTCCAAT CACCTTCCCC  
 TAAGCAGGAC ACGGTAAGGA AGGCCTGTAT CCCAGGGTCT CTATTGCTGA GCAATTGGGA AATCTCGGGG TTGTGAAGGA  
 CCTGGGCAAA GTTTTCATAT GAGTAGGTGC CACTCTGTAG GATGAGGTCT CCCCAGGCT CTAAACTTTG CCCACTCAAG  
 ATTAGTAGTT TATAAGCTGA TGAGCTGCTA AGAAGATGAT GAACCTCAGA GCTGATGCTG TCTGCACTGG GATTTACCAG  
 GATGATGGTC TCTAGGATCT CACTCTGGTG GCAAAGGGTC CTCG

SEQ ID NO:2419: (Length of Sequence = 837 Nucleotides)

GGAAGGATGA GAAACAGATT TNGCTCACT TCATGGGCTG GCCTGGAATT GACGATGGTG CAAACCCAAA TNATCCTGAT  
 GTAATINATG AAGATTATGG AACTGCAGCG AATGACATCG GGGACACCAC GAACAGAAGT AATGAAATCC CTTCCACAGA  
 CGTCACTGAT AAAACCGGTC GGGAAATCT CTGGTCTAT GCTGTGGTGG TGATTGCNTC TGTGGTGGGA TTTTCCCTTT  
 TGGTAATGCT GTTTCINCTT AAGTTGGCAA GACACTCCAA GTTTGGCATG AAAGGTTTGG TTTTGTMTCA TAAGATCCCA  
 CTGGATGGGT AGCTGAAATA AAGGAAAAGA CAGAGAAAGG GGCTGTGGTG CTTGTGGTGT GATGCTGCCA TGTAAGCTGG  
 ACTCTGGGA CTGCTGTGG CTTATCCCGG GAAGTGCTGC TTATCTGGGG TTINCTGGTA GATGTGGGG GTGTTTGGAG

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GCTGTACTAT ATGAAGCCTG CATATACTGT GAGCTGTGAT TGGGGAACAC CAATGCAGAG GTAACCTCTCA GGCAGCTAAG  
CAGCACCTCA AGAAAACATG TTAAATTAAT GCTTCTNITC TTACAGTAGT TCAAATACAA AACTGAAATG AAATCCCAT  
GGATTGTACT TCTNINCTGA AAAGTGTGCT TTTTGACCTT ACTGGACATT TATTGACTTA ATTGCTTCTG TTTATTAAAA  
TTGACCTGCA AAGTTAAAAA AAAATTAAAG TTGAGAACAG GTATAAGTGC AACTGAATA GTCTAATCTA CATGTAACAC  
ATATTNNGT ATGATTTTCT ATACTCTAAT CAGCACT

SEQ ID NO:2420: (Length of Sequence = 1843 Nucleotides)

GAAGCTCCGG CCCAGGTGGC CGCTGGCTGC TGAGCTCAG CCAAGGTGCG GCTGTGGTGG TGGTGGTGGC GGCTGCAGGC  
TTTGCTGCTG CTGGATGTTT GCTGGCTGCA GGTTCGTCTG CTGCATCTGT AAGTTTGTG GCTGCACCTG CTGGGTCTGC  
ACCAGGTGAG GCTGGGTGGC CAGCCGGGTG CTGGGCAGGC CCTGGTAGCT CATCATCTGG GACAGGGCGC TGGCAGCAAG  
GCTACTGTGC AGCGGGCCTA CCATGCCATG CTGCAGGGAG GGGGCTGTG TGCTCAGGGG GCTGTGGTGC AACTCCCCC  
GCAGAGGGTT GTATTGGTTC GGCACCATGC CGCTCTGCAG CCGGGACAGC CACTCGCATT GACCATTCAA ACTGGTGGAC  
CCGNCCACAG TGAAATTCAG GGCCCTCCG CTGCTNGAGC CCAGGACGGT GCTGTGCCA GAGGCCACAG GCAGGTGGGA  
GAGACGAGGT GGGCCAGTNT TAAAGGCCAG CCGGCCGCC CCACCCANOG CCGCCATYTC GGGCTTGGCC GCCACGTCA  
GGTNCNNAT GCCCAGGTGG GTGTGGGCA TYCCAGGCAG GTGGTTGAGG GGCACGAGC GAGACTGCTG GAACGGGGAG  
GGCAGNAGTG GCGGCGAGGC CACGTCGAC AGGTAGCCAT GGGGTGACTC CAGGGAGTCC ACGGGCGAGA GCATGCGGA  
GCTGTCCAGC AGGCAGNCCT TGCGTCCCTG GGAATCTCTC CTCGTGCTT TGAGGTCTT GGCTCTCTG CTTCACAGG  
CCAGGCCCTT GCTGCTGGC TTGCGGACCT TCTTGCCCTG CACGCCGGC TTGAGGCTGC CCAGGTAGCC GTTGGCGAG  
CAGAGCGNGG GCGACAGGT GGGCGTCCC CCAGCGGGC TCCGTGCAGC TGCGGGCTGC GCACCAAGTT GTACTCGTCC  
AGCAGCCTCA CGATGTCTG ATGCATGCNC TCCTNTGCGA TGTGCGCGG CAGGCGTCC ATATGATCCG TGATGTCCCG  
GTGGCAAAG TGGTCCAGCA GCACCTTGGC GGTCTGTAG CTGCCCTCCC GGGCGGCCAG AAACAGGGGT GTCTCTCTCC  
TGTGTCTCTG CATATCTTTG TTAGCCCGT TCTTCAGGAG CACAAGTGG GCATCCACAT TGTTCACNGC GCGGCGCCAG  
TGCAGGGCGG ACTTGCCAG GTNATCTACG GCGTTGACGT CCGGTGTGA GTTGATGAG TCCTCCAGCA TGCCCTCCAC  
GGCCAGGCGG GCAGCCAGCN TCAGTGGCGT CGTGCCATCA TGATGCGGG CATCCAGGTG TGTGGCTCGG TTCCGGATCA  
GGATCTTGA AGACACCTTG TGCGTCCGCA GACACAGCG CATGCAGCG GGTGCGGCC ATGTTGTCTT GATGTTGGC  
ATCTGCGCTG GCTCCAGCA GCGCTTGGC GGCATCAGAG CGTGAGTAG GGGCGGCCAG GTGCAAGCG GTCTCGCCCG  
TNCGTCTGT CTGGTTGTG AAGCTGGCG CCTGGTAGAT GAAGTCGGAG ATGACGGCG GCGGTCTCT CTCCTCTCG  
CTGTGCCCC TCTCCAGGC GCGCCGCTG CAGGAGCGCA TCATGAGCG GGTGAAGCCA TCAGGCCCGC GGACATTGAC  
GTCCATGCG TCGCGTCAA CCTCACCTG GGGCGGTGT GGGGCCATG CANACATGC CAGGTACAG GCATCCAGGT  
GCTGCTGAGT CCACTGCCG TGGTCTGTCT GGTCTGTCAG GTCAGGCAGA ACCACGGGCT CCGGAACCG GAATCTCTG  
GTC

SEQ ID NO:2421: (Length of Sequence = 1452 Nucleotides)

CCAGCAACTC AAATTCACCA CTOGGACTC CTGCGACCG ATCAAAGACG AATTTCAGCT ACTGCAAGNT CAGTACCACA  
GCCTCAAGCT CGANTGTGAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CGTCACTATG TGATGTACTA CGAGATGTCC  
TACGGCTTGA ACATCGAGAT GCACAAACAG GCTGAGATG TCAAAAGGCT GAACGGGATT TGTGCCAGG TCCTGCCCTA  
CCTNTCCCAA GAGCACCAGC AGCAGGTCTT GGGAGCCATT GAGAGGGCCA AGCAGGTAC CGCTCCCGAG CTGAACCTA  
TCATCCGACA GCAGCTCAA GCCCACCAGC TGTCCAGCT GCAGGCCCTG GCGCTGCCCT TGACCCACT ACCCGTGGG  
CTGCAGCGC CTTGCTGCC GCGGTGAGC GCAGGCACCG GNTCTCTCTC GCTGTCCCGC CTTGGGTTC CAGGCCACC  
TCTCAAGGA AGACAAGAAC GGGCACGATG GTGACACCCA CCAGGAGGAT GATGGCGAGA AGTCGGATTA GCAGGGGGC  
GGGACGGGGA GGTGGGAGG GGGGACAGAG GGGGACAGA GGCACGGAGA GAAAGGAATG TTTAGCACA GACACAGCG  
ANCTGGGAT TGGCTAACT CCCATAGTAT TTATNGTGGC GCGCGCGGG GCGCCAGCC CAGCTTGCAG GCCACCTCTA

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GCTTCTTCC TACCCCAATC CCGGCTTCCC TCCTCTCTCC CTGCAGCCTG GTTAGGTGGA TACCTGCCCT GACGTGTGAG  
GCAAGNTAAG GCCTGGAGGG TCAGATGGGG AGACCAGGTC CCAAGGGAGC AAGACCTGCG GANGCARGCA AGCCCCNGCC  
CTTCCCCCGT TTTGAACATG TGTAACOGAC AGTCTGCCTG GGCCACAGCC CTCTCACCTT GGTACTGCGT GGACGNAATG  
CTAGCTGCCC CTTTCCCGTN CTGGGCACCC CGAGINTCCC CGACCCCCGG GTCCCAGGTA TGCTCCACC TCCACCTGCC  
CCACTCACCA CCTCTGNTAG TNCCAGACAC CTNCACGYCC ACCTGGTCCT CTNCCATCGC CCACAAAAGG GGGGGCACGA  
GGGACGAGCT TAGCTGAGCT GGGAGGAGCA GGGTGAGGGT GGGCGACCCA GGATTCCTCC TCCCCTTCCC AAATAAAGAT  
GAGGGTACTA AAGTTGTCTT GGTTTTTATT TTATTATTAT TTTTTCITT TTCCAGTATA CTAGCTTGTC TTTTAAGAAA  
GGGGATATTA AAAAAAAAAA AAAGACAAAA GTGTTTTTAA AAAAAAGCAA CACCCACACC TGGTGTCTGT ATATAGTCAG  
CTTATCTCGT GTTCAATCGT CTGATCTCTA CAGAGAGAAG TGGAAAATGC TGTATCAAGG GTGGGCTTAG CTGTGCCTTT  
CCAATAAAGA TG

5      WHAT IS CLAIMED IS:

1. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS 650, 1834, and 2073;

10                      or having a sequence complementary thereto.

2. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

15                      or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

3. An isolated polynucleotide that includes a sequence designated as one of:

20                      SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

                        or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

25      4. An isolated polynucleotide operably coding for a native human polypeptide or protein, which includes a region coding for the same amino acid sequence as a native human coding region corresponding to a sequence designated as one of:

SEQ ID NO: 316 - 2421.

30      5. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 6 and is one of SEQ ID NOS: 316-2421.

6. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 7 and is one of SEQ ID NOS: 316-2421.

35      7. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a metabolic functional grouping and is one of SEQ ID NOS: 316-2421.

8. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a structural functional grouping and is one of SEQ ID NOS: 316-2421.

5 9. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 11 in a developmental control grouping and is one of SEQ ID NOS: 316-2421.

10. An isolated polynucleotide coding for a human protein or polypeptide, which includes a coding region corresponding to the EST identified as:

10 SEQ ID NO: 316 - 2421;

or a polynucleotide complementary thereto.

11. The polynucleotide of Claim 10, wherein the SEQ ID NO is 316-1000.

15 12. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1001-1500.

13. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1501-2000.

14. The polynucleotide of Claim 10, wherein the SEQ ID NO is 2001-2421.

20 15. The polynucleotide of Claim 10, wherein said polynucleotide further includes the entire sequence designated as any one of SEQ ID NOS: 316-2421.

25 16. An isolated polynucleotide comprising at least 150 bp of a sequence of Claim 10 and wherein said SEQ ID NO excludes NOS 485, 650, 1834, 2073, 2092, and 2353.

30 17. An isolated polynucleotide sequence, which hybridizes to a sequence designated as any one of SEQ ID NOS 316-2421, except SEQ ID NOS 485, 650, 1834, 2073, 2092, and 2353, or to a sequence complementary thereto, under hybridization conditions sufficiently stringent to require at least 97% base pairing.

18. A polynucleotide according to any one of Claims 4-17, in substantially purified form.

19. A construct in isolated form comprising a vector and a polynucleotide according to any one of Claims 1-17.

35 20. The construct according to Claim 19, further comprising a promoter operably linked to said polynucleotide.

21. A panel of at least 100 isolated polynucleotides having the sequences of Claim 3 or Claim 16.

22. An antisense oligonucleotide capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10.

23. A triple helix probe capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10 having at least a 10-base homopurine or homopyrimidine sequence, said probe comprising single-stranded DNA having at least a 10-base homopurine or homopyrimidine sequence and being adapted to bind to the major groove of double stranded DNA which includes said polynucleotide-encoding sequence.

25. The polynucleotide of Claim 1, wherein said SEQ ID NO is 913.

26. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1039.

27. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1395.

28. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1567.

29. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1667.

30. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1704.

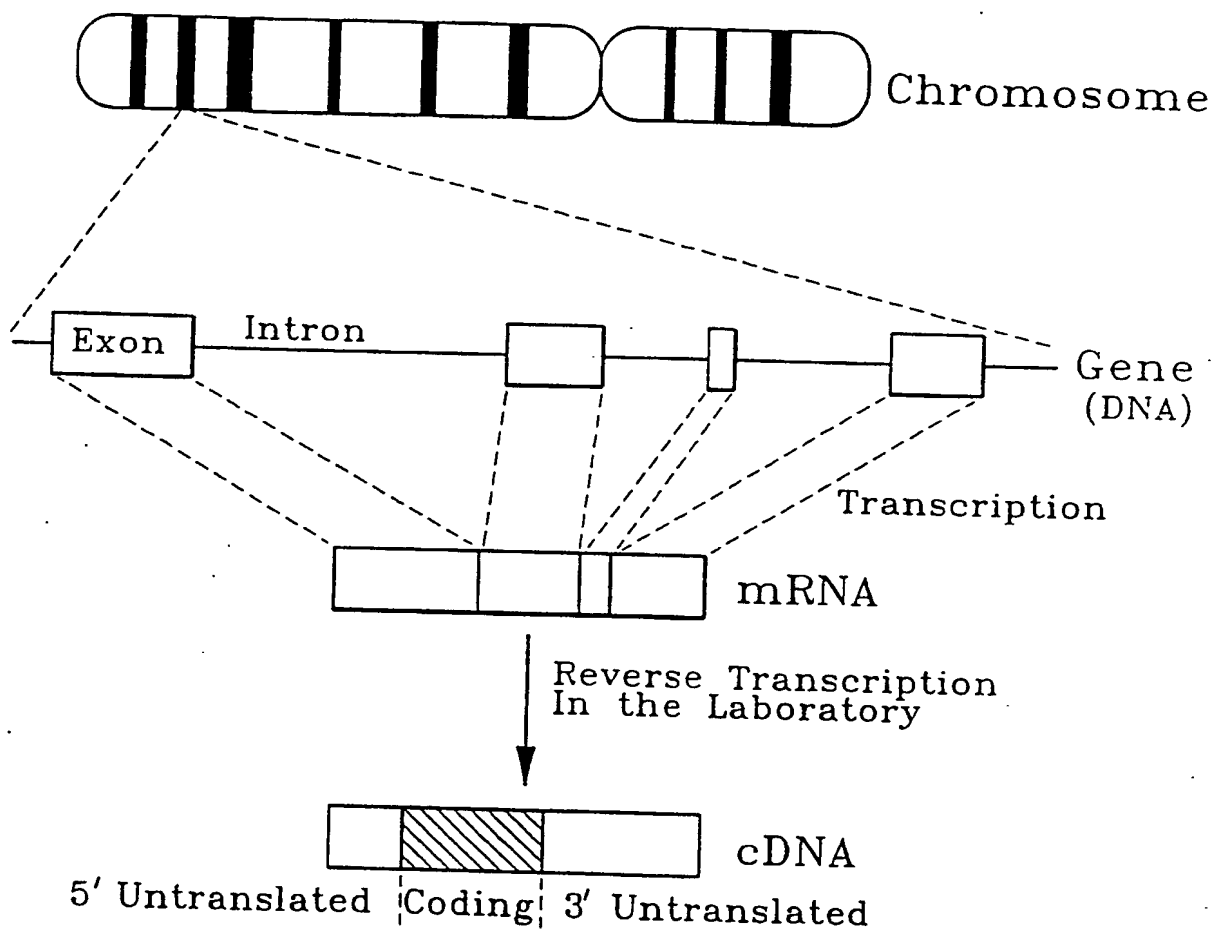
31. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2089.

32. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2297.

33. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2302.



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**FIG. 1****SUBSTITUTE SHEET**





## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>5</sup> :</b> <b>C12N 15/11, C12Q 1/68</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 93/16178</b> <b>(43) International Publication Date:</b> 19 August 1993 (19.08.93)
<b>(21) International Application Number:</b> PCT/US93/01294 <b>(22) International Filing Date:</b> 12 February 1993 (12.02.93) <b>(30) Priority data:</b> 07/837,195 12 February 1992 (12.02.92) US <b>(71) Applicant:</b> THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; Washington, DC (US). <b>(72) Inventors:</b> VENTER, Craig, J. ; 1718 Nordic Hill Circle, Silver Spring, MD 20906 (US). ADAMS, Mark, D. ; 12812 Sage Terrace, Germantown, MD 20874 (US). MORENO, Ruben, F. ; 14415 Coral Gables Way, North Potomac, MD 20878 (US).		<b>(74) Agents:</b> ALTMAN, Daniel, E. et al.; Knobbe, Martens, Olson and Bear, 620 Newport Center Drive, 16th Floor, Newport Beach, CA 92660 (US). <b>(81) Designated States:</b> AU, CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). <b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> <b>(88) Date of publication of the international search report:</b> 25 November 1993 (25.11.93)
<b>(54) Title:</b> SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT  <b>(57) Abstract</b>  Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.		

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 93/01294

## I. CLASSIFICATION OF SUBJECT MATTER (If several classification symbols apply, indicate all)<sup>6</sup>

According to International Patent Classification (IPC) or to both National Classification and IPC  
 Int.C1.5                      C 12 N 15/11                      C 12 Q 1/68

## II. FIELDS SEARCHED

### Minimum Documentation Searched<sup>7</sup>

Classification System

Classification Symbols

Int.C1.5

C 07 K

C 12 N

C 12 Q

Documentation Searched other than Minimum Documentation  
to the Extent that such Documents are Included in the Fields Searched<sup>8</sup>

## III. DOCUMENTS CONSIDERED TO BE RELEVANT<sup>9</sup>

Category <sup>10</sup>	Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup>	Relevant to Claim No. <sup>13</sup>
X	SCIENCE vol. 252, 21 June 1991, WASHINGTON, DC, USA pages 1651 - 1656 M.D. ADAMS ET AL. 'Complementary DNA Sequencing: Expressed Sequence Tags and Human genome Projects' see the whole document ---	1-11,15 -23
P,X	NATURE vol. 355, 13 February 1992, LONDON, UNITED KINGDOM pages 632 - 634 M.D. ADAMS 'Sequence Identification of 2375 human brain genes' -----	1-11,15 -23

### <sup>10</sup> Special categories of cited documents :

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- "O" document referring to an oral disclosure, use, exhibition or other means
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- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "A" document member of the same patent family

## IV. CERTIFICATION

Date of the Actual Completion of the International Search

07-07-1993

Date of Mailing of this International Search Report

22. 10. 93

International Searching Authority

EUROPEAN PATENT OFFICE

Signature of Authorized Officer

VAN PUTTEN A.J.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 93/01294

**Box I** Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos. because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos. because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos. because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box II** Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see PCT/ISA/206 mailed on 12.08.93

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11, 15-23(part.)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.